

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

FIG. 1A

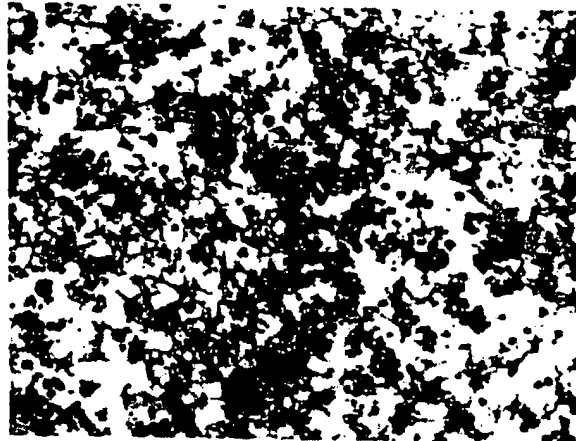


FIG. 1B

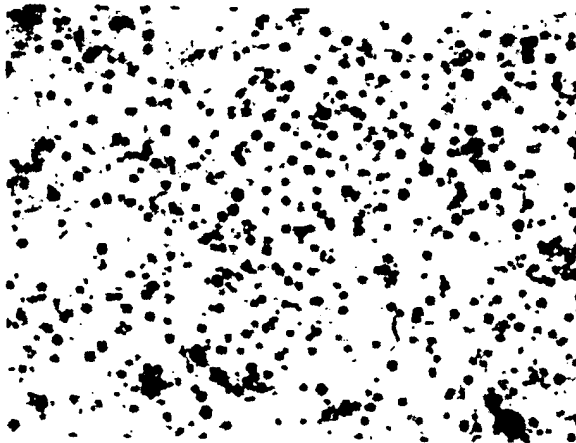
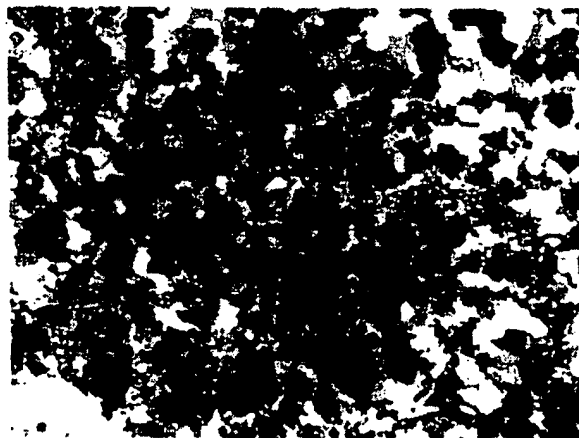


FIG. 2A



FIG. 2B



Stacey C. Slater
Klarquist Sparkman, LLP
121 SW Salmon Street
Suite 1600
Portland, Oregon 97204
Telephone: (503) 226-7391
Page 3 of 66

Our Ref. No. 245-67734
For: METHOD AND SYSTEM FOR
CLASSIFYING A SCENARIO
Inventor(s): Chaplen et al.
Express Mail Label: EV339206009US
Mailed: March 12, 2004



FIG. 3A



FIG. 3B

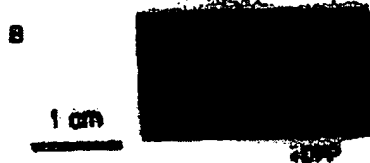


FIG. 3C

FIG. 4A

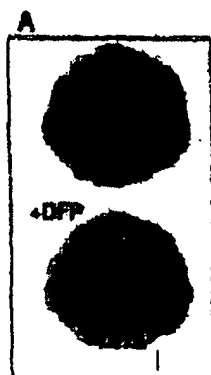
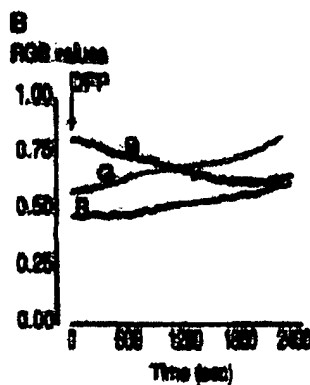


FIG. 4B



C



FIG. 4C



FIG. 5A

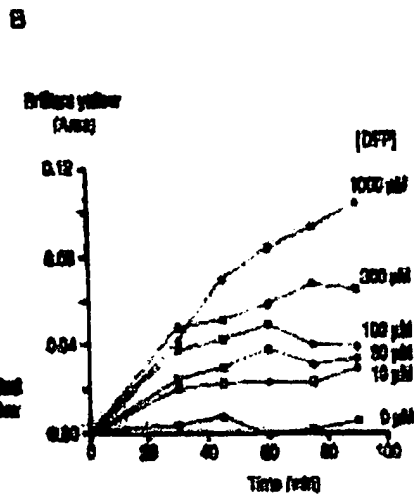


FIG. 5B

FIG. 6A

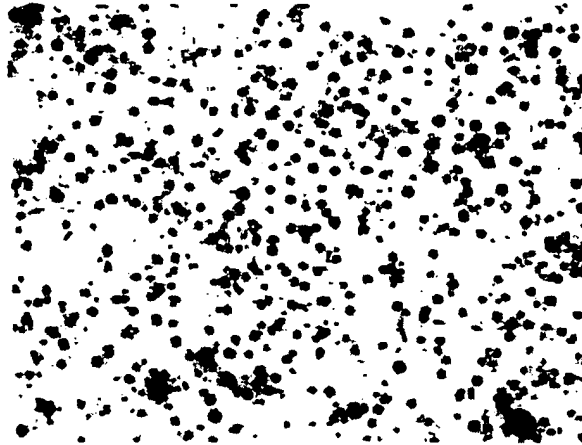


FIG. 6B

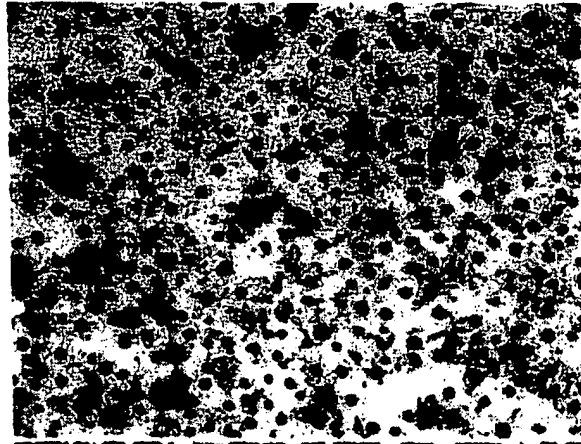


FIG. 6C



Before adding bacteria After adding bacteria

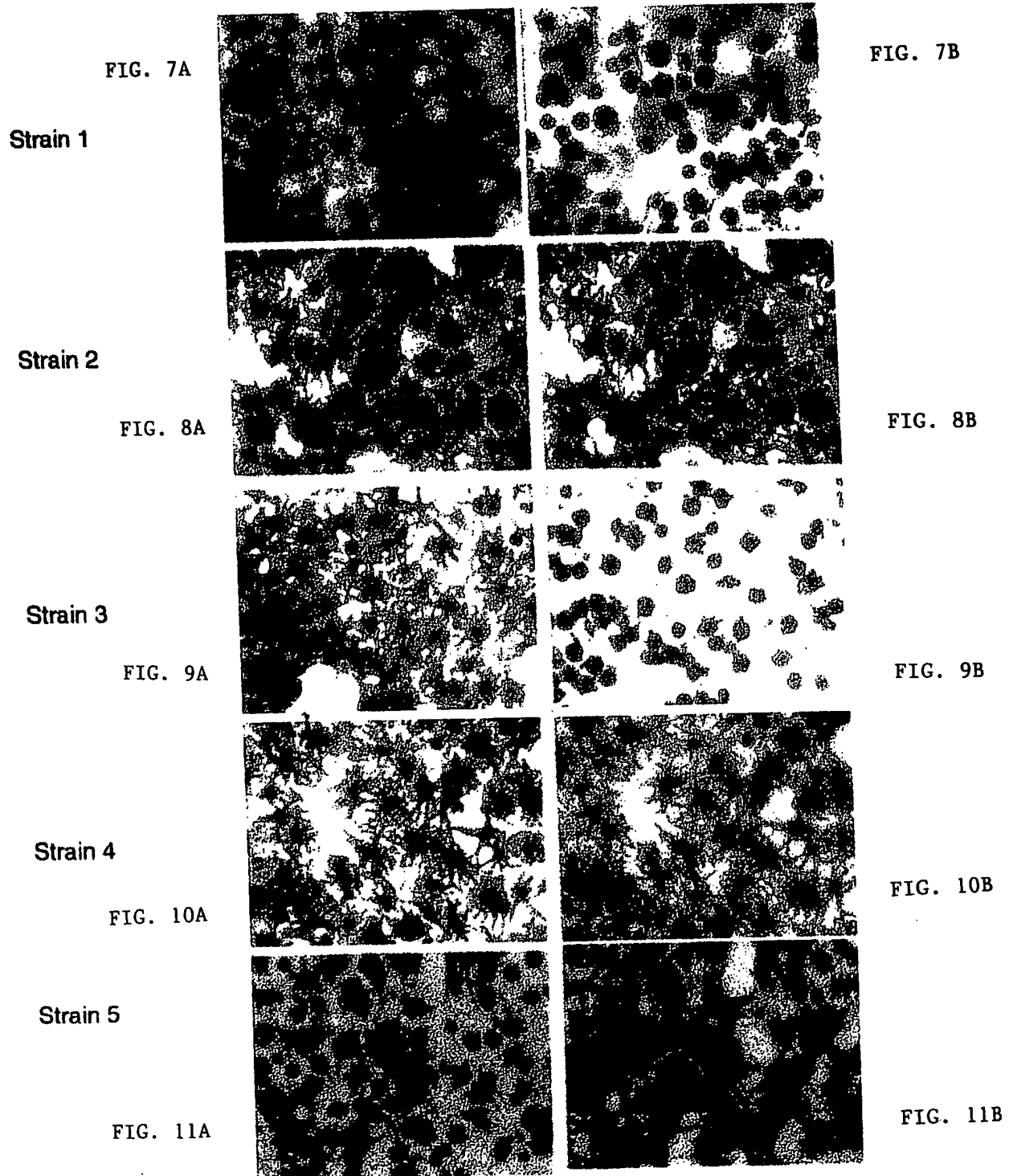


FIG. 12A

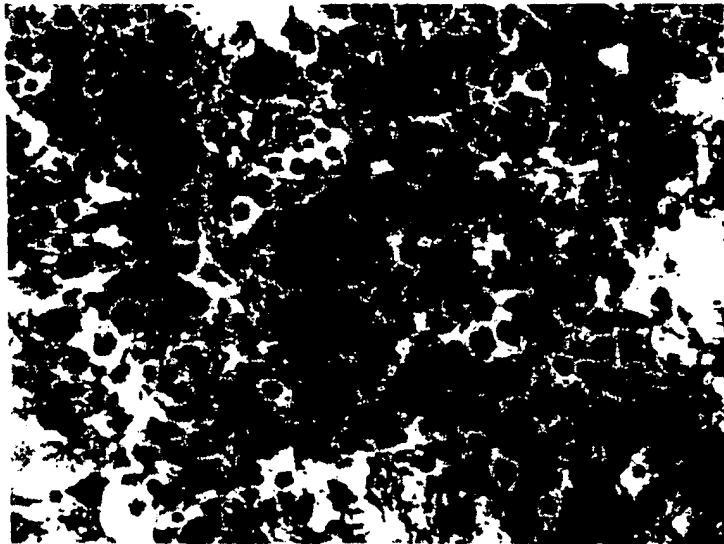


FIG. 12B

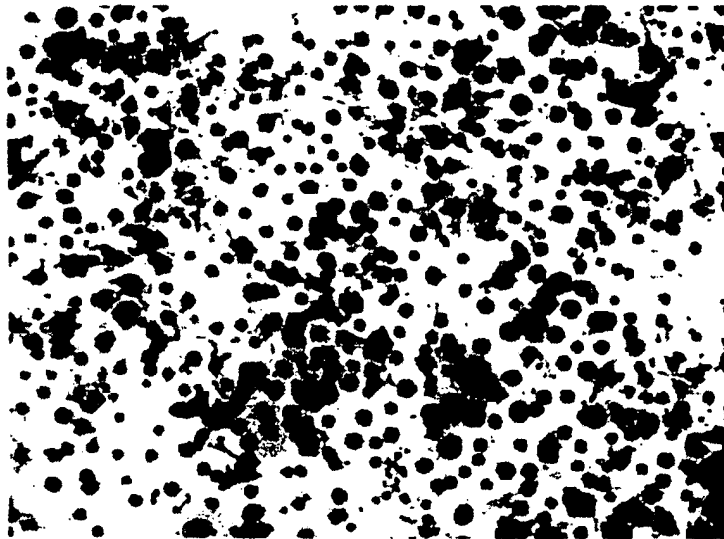


FIG. 13



















	Agent	Chemical Type	Effective dose	Direct Effects	Challenge A (norepinephrine)	Challenge B (forskolin)
Control	None					
I	DFP Mipafos Paraoxon	phosphorofluoridate phosphorofluorodiamidate phosphate	ppm			
II	PMSF EPN	sulfonylester phosphorothioate	ppm			
III	Mevinphos Dichlorvos	phosphate phosphate	ppt			
IV	Trichlorfon	phosphonate	ppt			
V	Chlorpyrifos Fenitrothion Morphos Carbaryl Methomyl 2,5 Hexanedione Acrylamide	phosphorothioate phosphorothioate phosphorothioate carbamate carbamate diketonamide	ND			

FIG. 14B

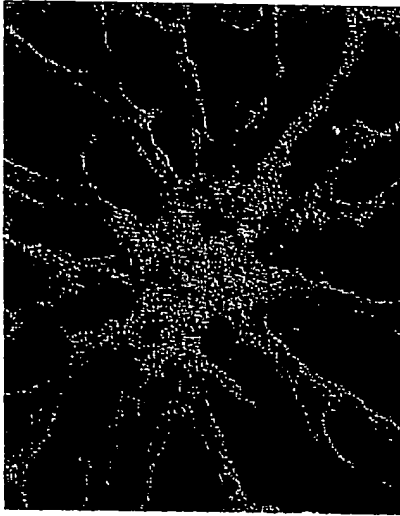


FIG. 14D

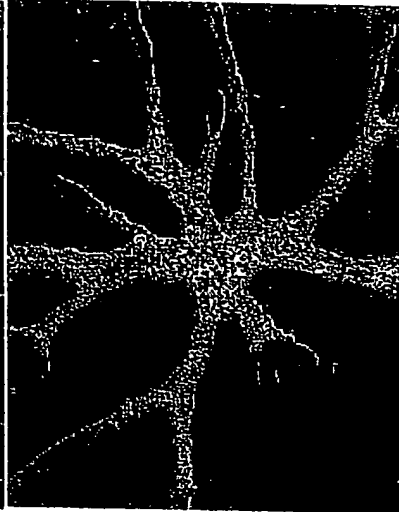


FIG. 14A

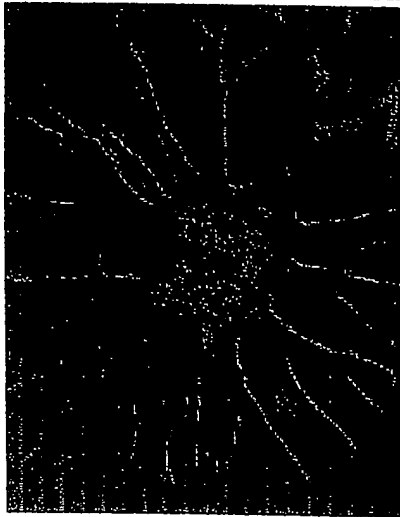


FIG. 14C



FIG. 15A

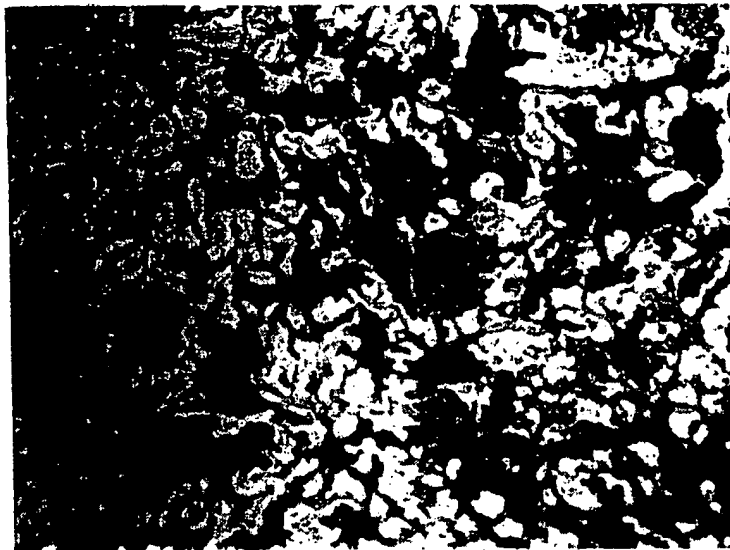


FIG. 15B



100 microns

FIG. 16C

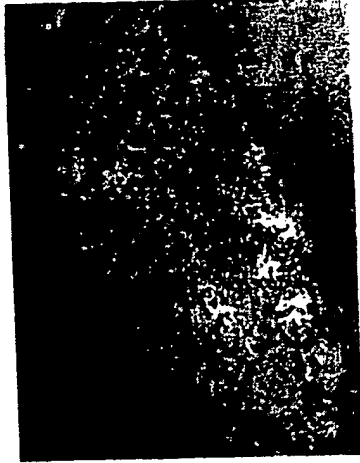


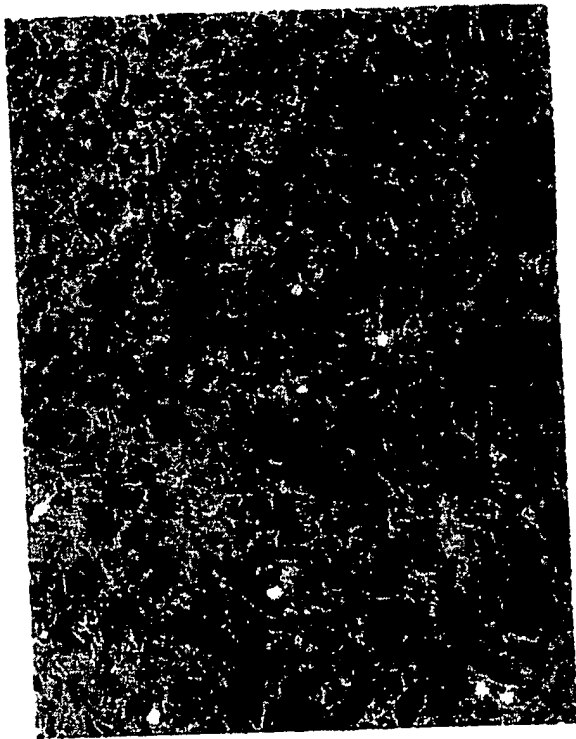
FIG. 16B



FIG. 16A

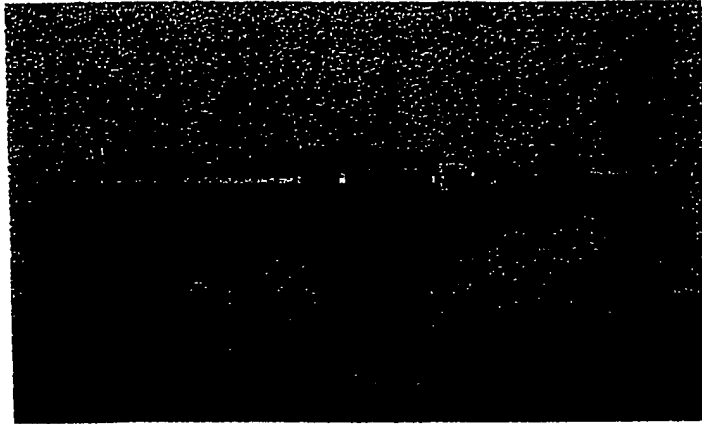


FIG. 17



Hardware construction for the encapsulation of SOS sensor cells.

FIG. 18A



Extruder
hardware
(assembled)

FIG. 18B

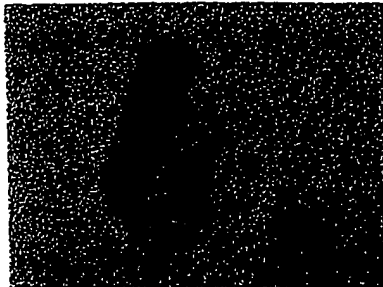


FIG. 18C

Air-flow
adjustment
mechanism

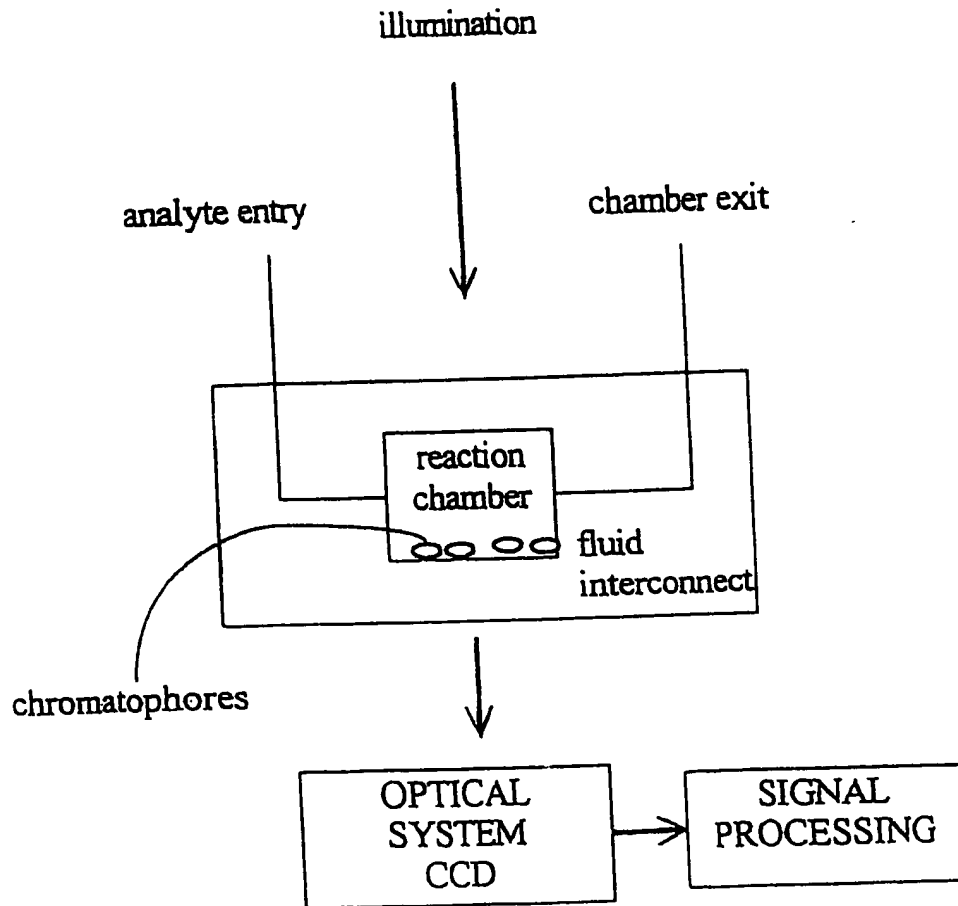


FIG. 19

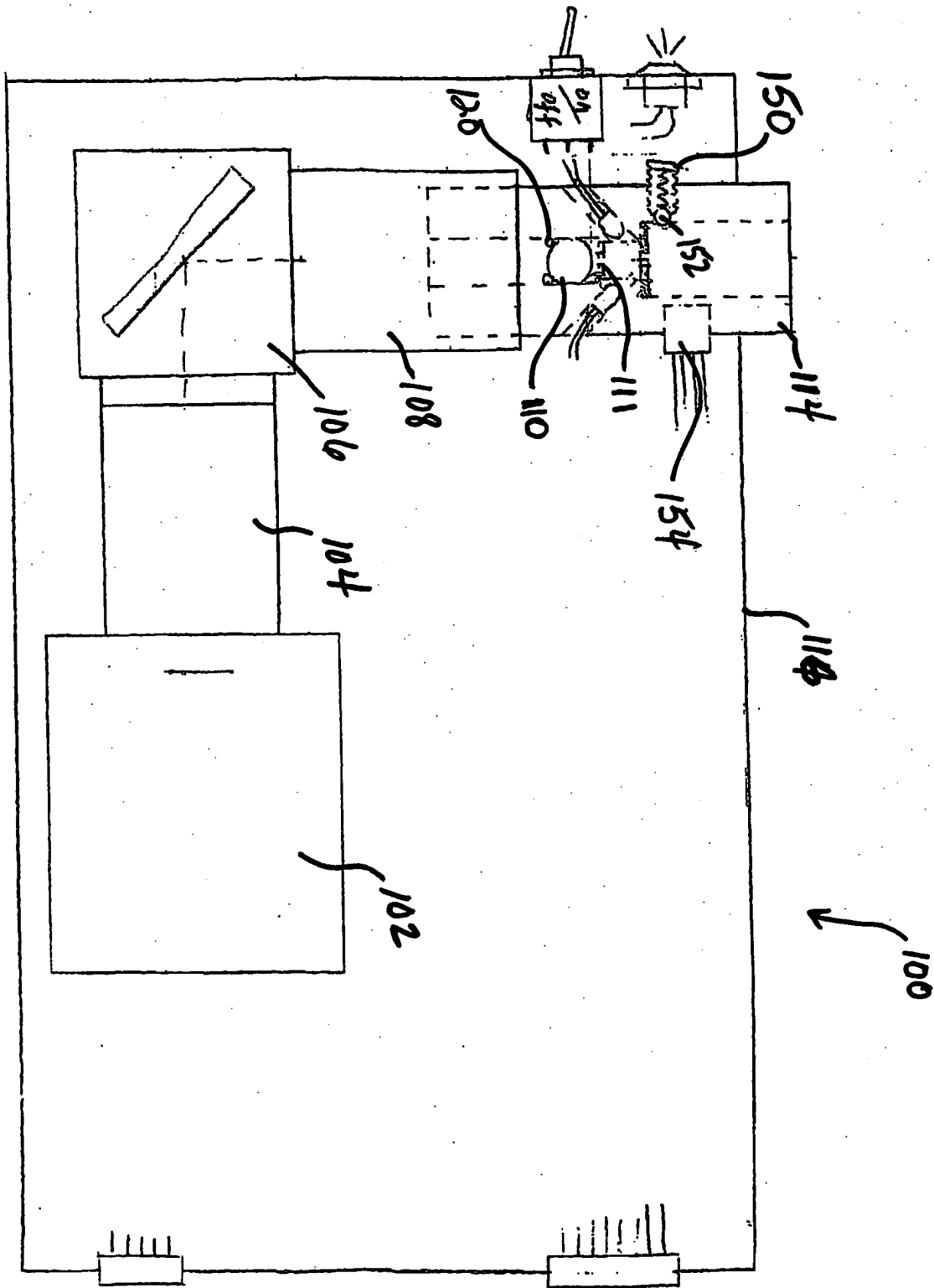


FIG. 20

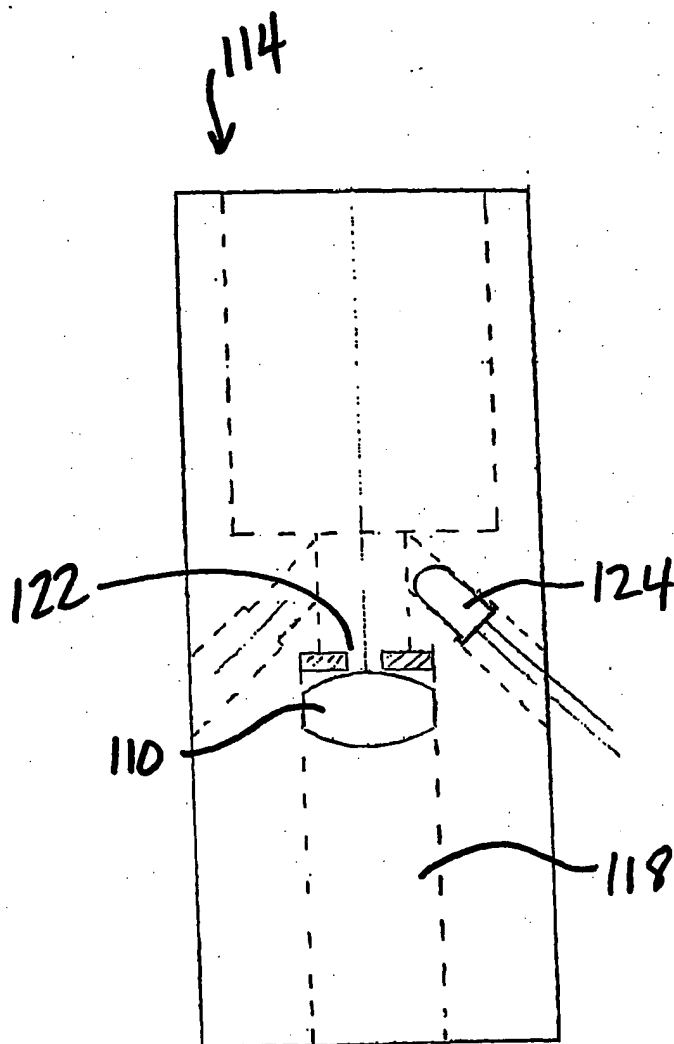


FIG. 21

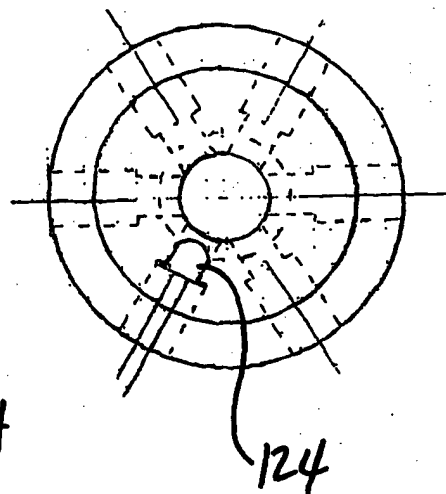
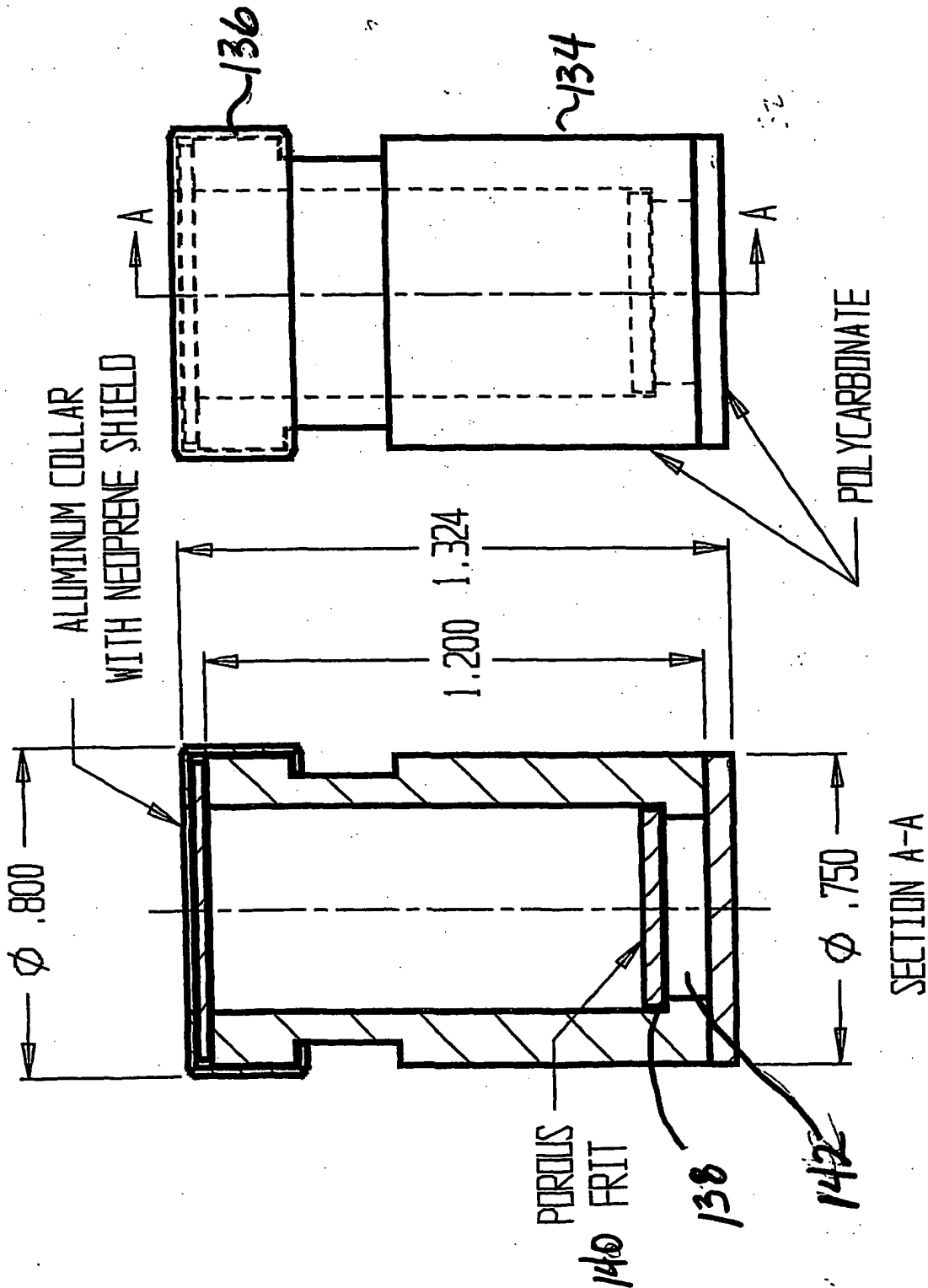


FIG. 22



APOLLO CHAMBER ASSEMBLY

FIG. 23

FIG. 24

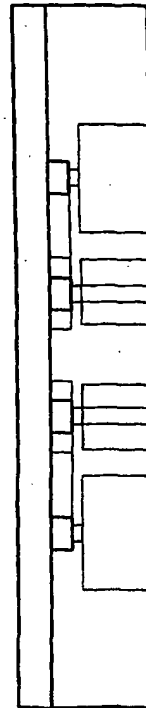
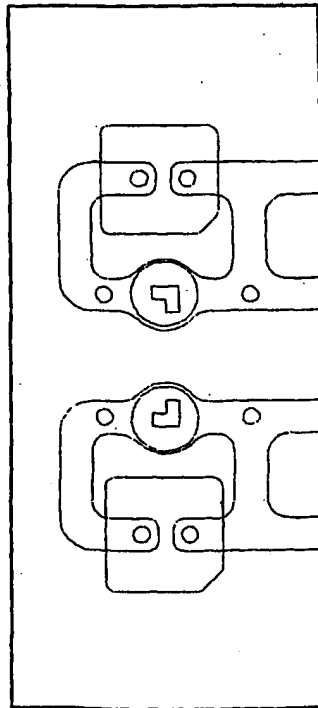
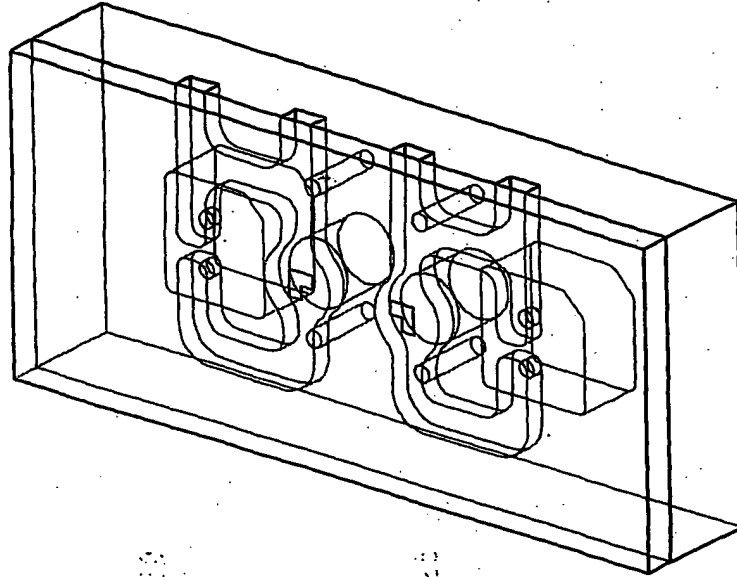
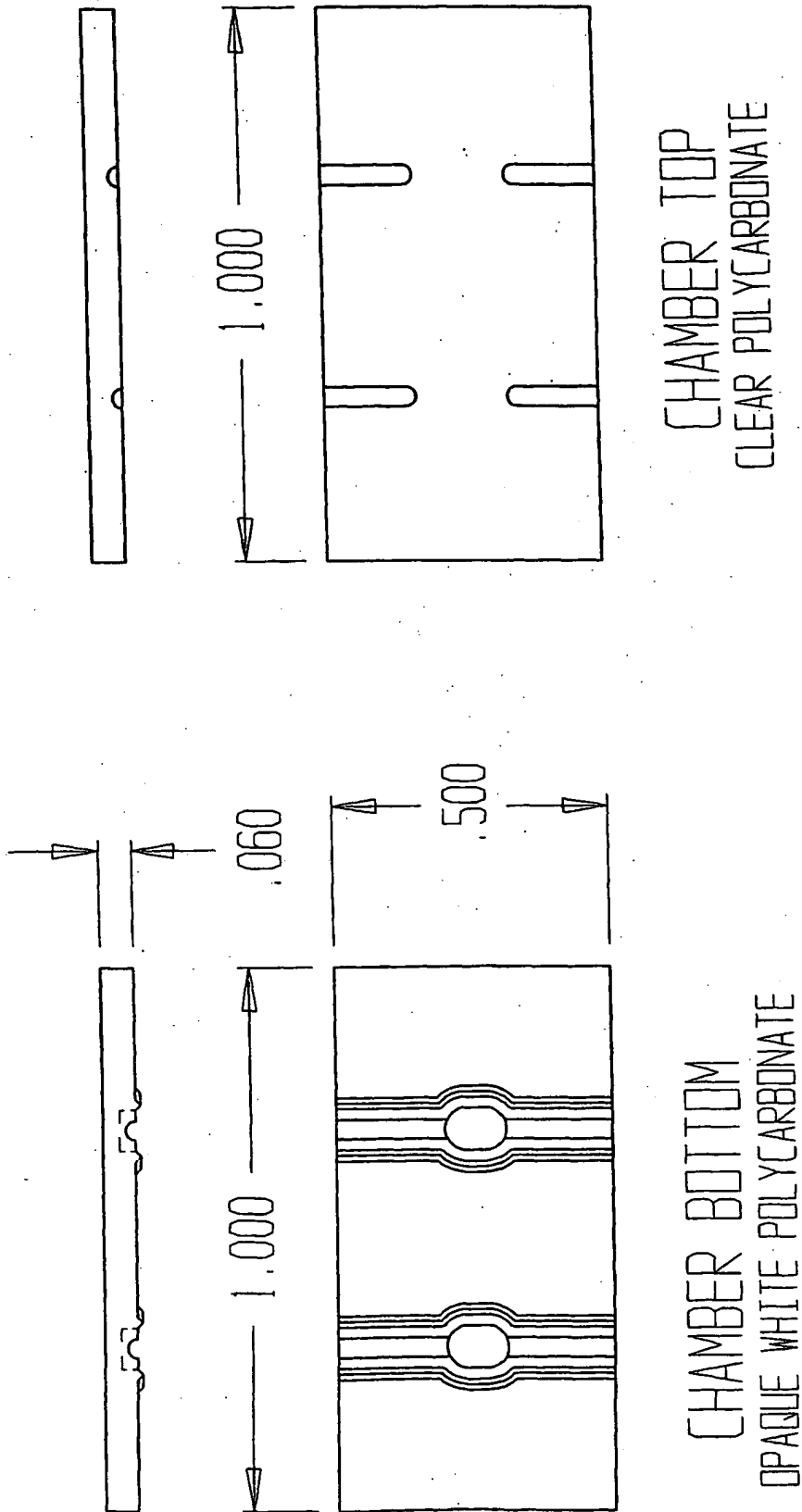
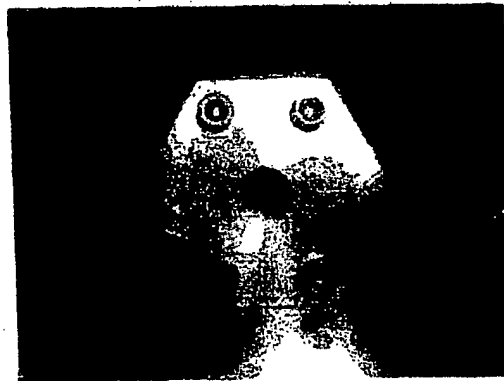
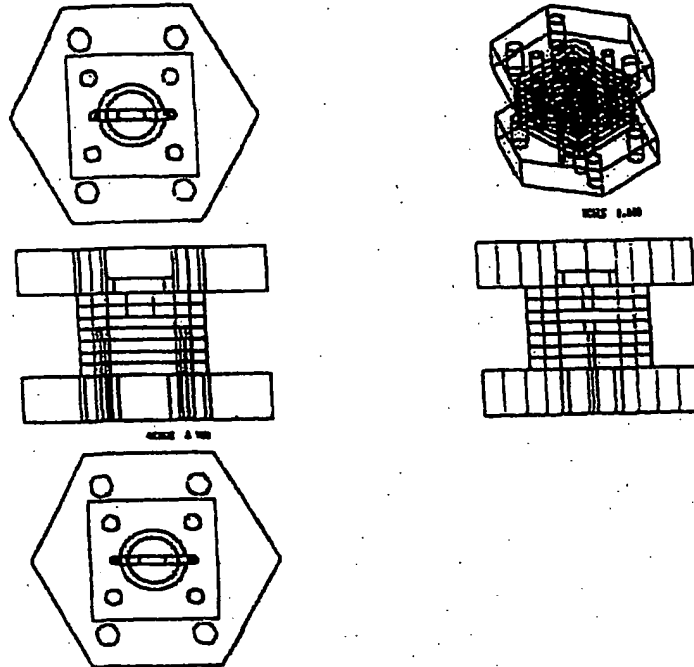


FIG. 25A





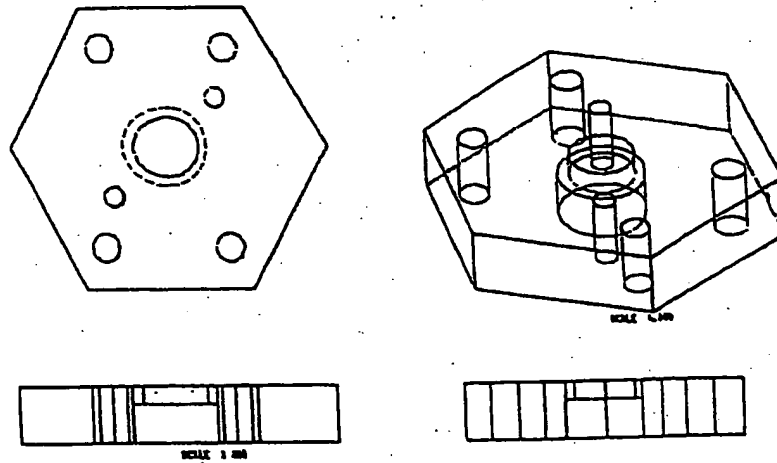


FIG. 27

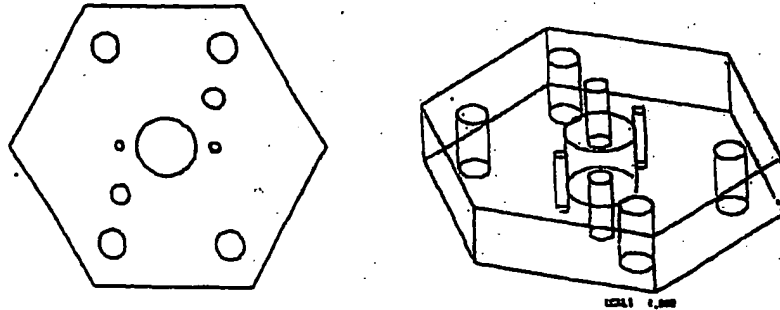


FIG. 28A



FIG. 28B



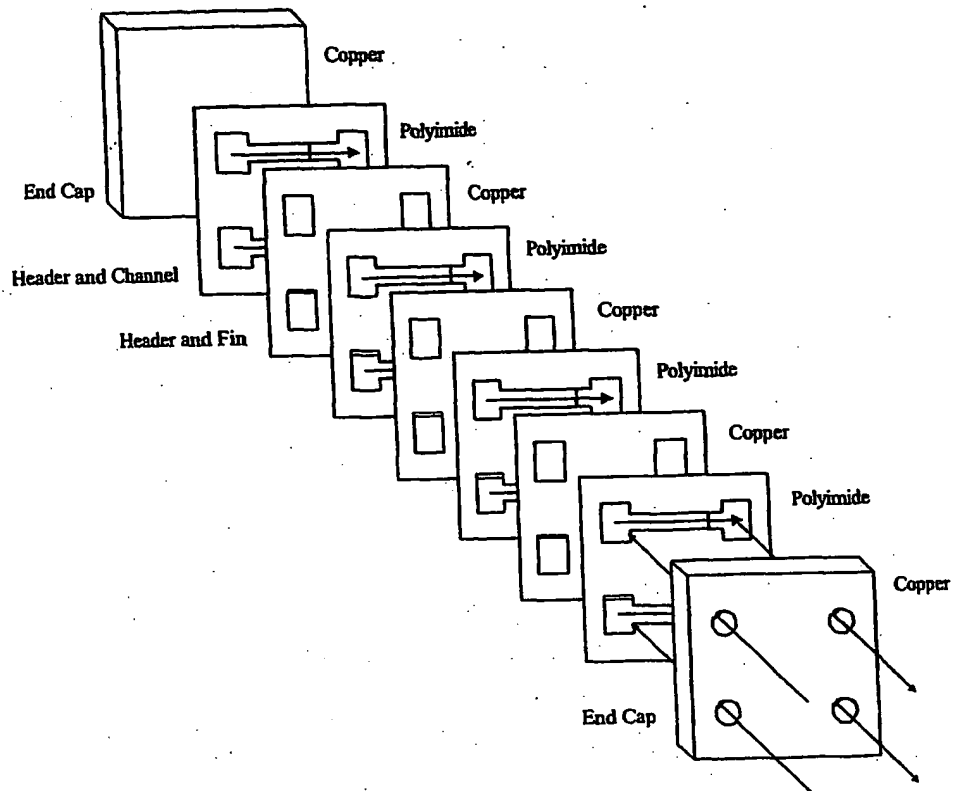


FIG. 29

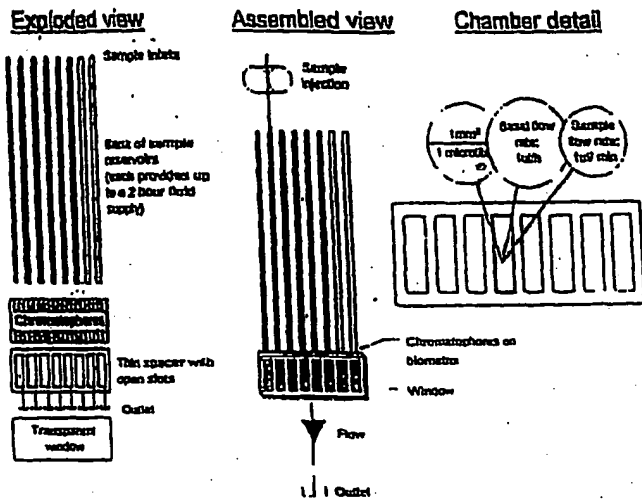


FIG. 30A

FIG. 30B

FIG. 30C

Stacey C. Slater
Klarquist Sparkman, LLP
121 SW Salmon Street
Suite 1600
Portland, Oregon 97204
Telephone: (503) 226-7391
Page 25 of 66

Our Ref. No. 245-67734
For: METHOD AND SYSTEM FOR
CLASSIFYING A SCENARIO
Inventor(s): Chaplen et al.
Express Mail Label: EV339206009US
Mailed: March 12, 2004

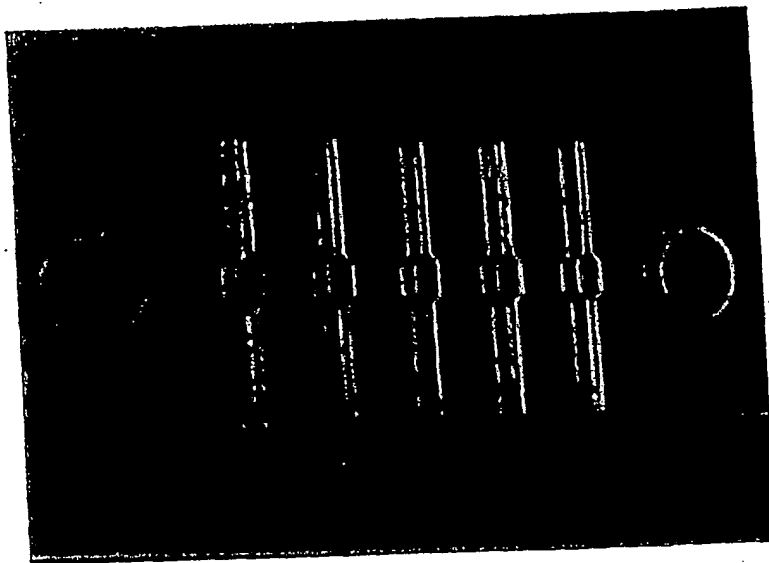


FIG. 31

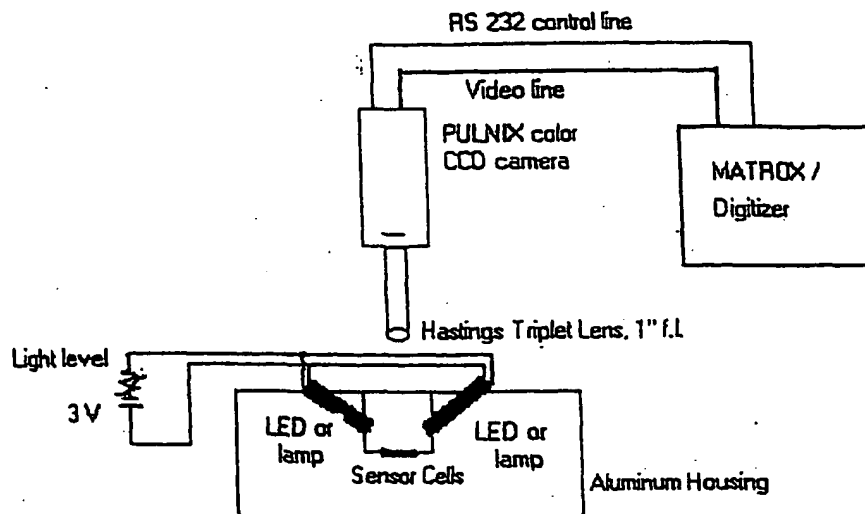
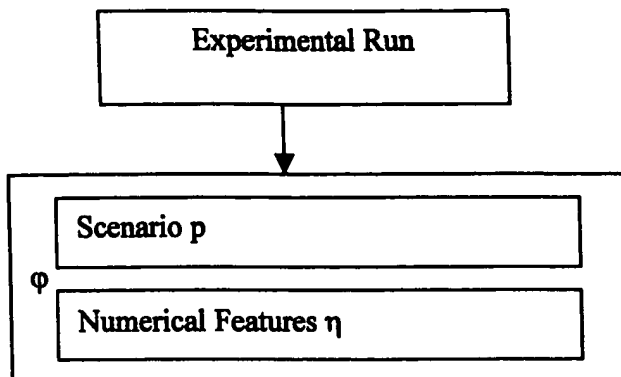
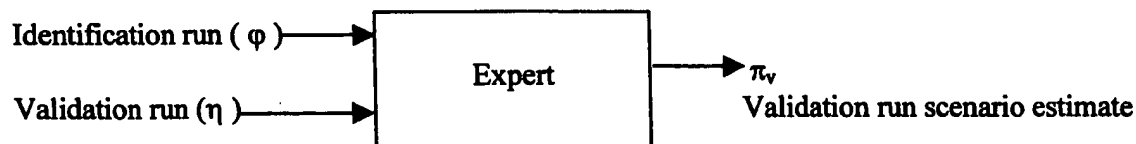


FIG. 32

Patent: Soft Classification Flowchart Version 1.0



Calibration run = experimental run with a known scenario.
 Calibration runs are divided into identification and validation runs.



Operational run = scenario is not known and only numerical features are available.

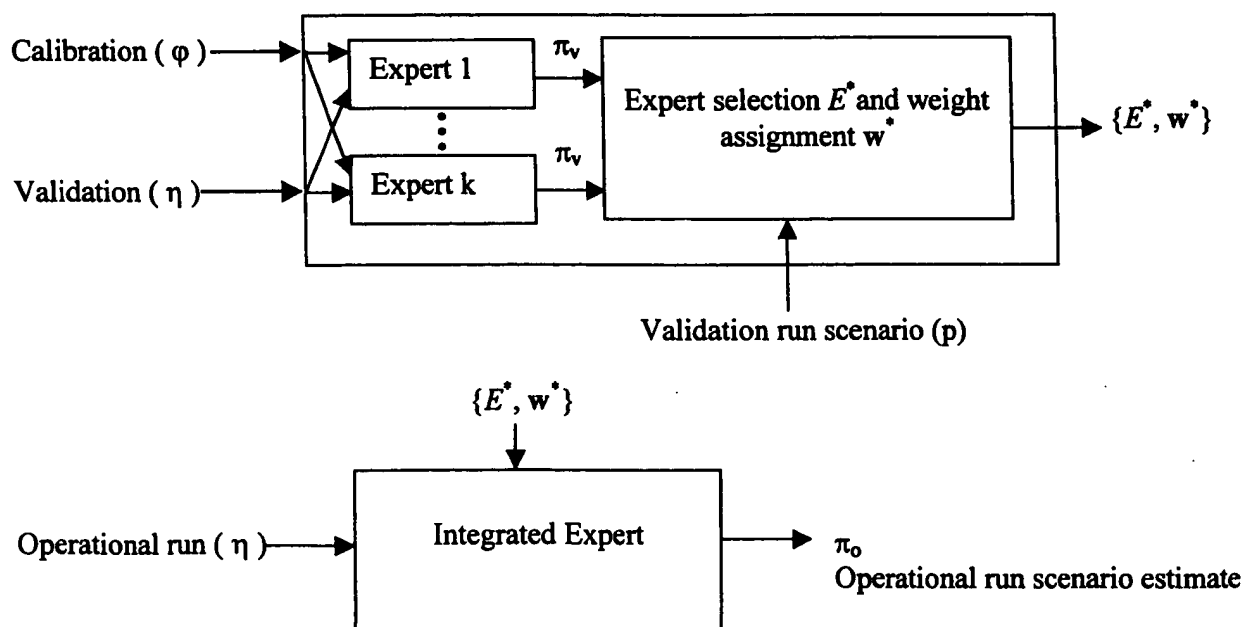


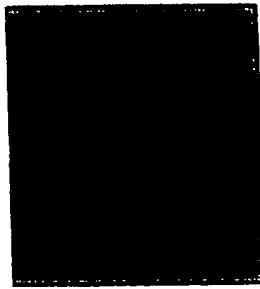
FIG. 33

FIG. 35A

(-) Ca^{2+}



FIG. 35B



(+) Ca^{2+}

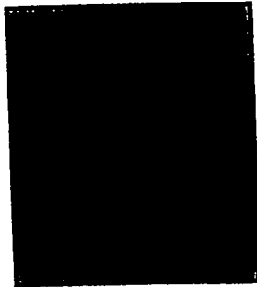


FIG. 34A

Before

FIG. 34B

After 10nM
Norepinephrine

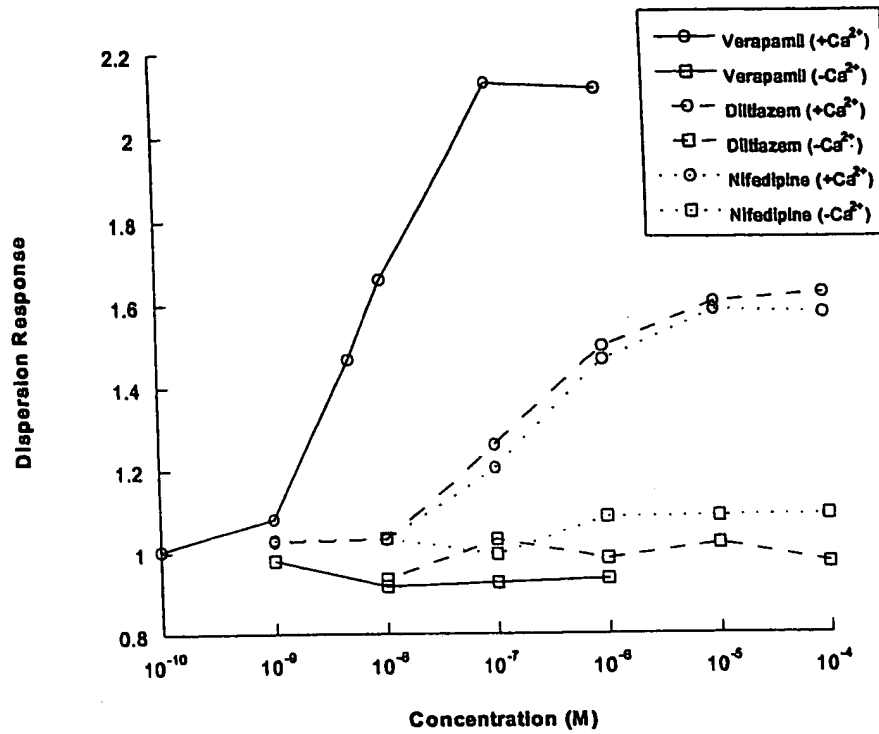


FIG. 36

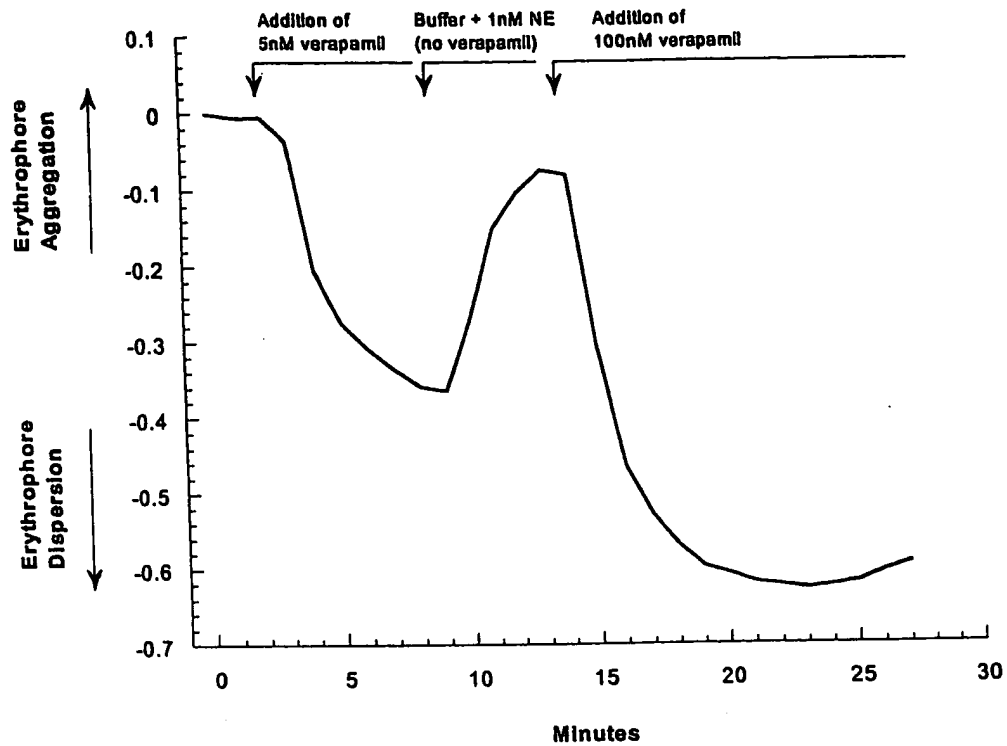


FIG. 37

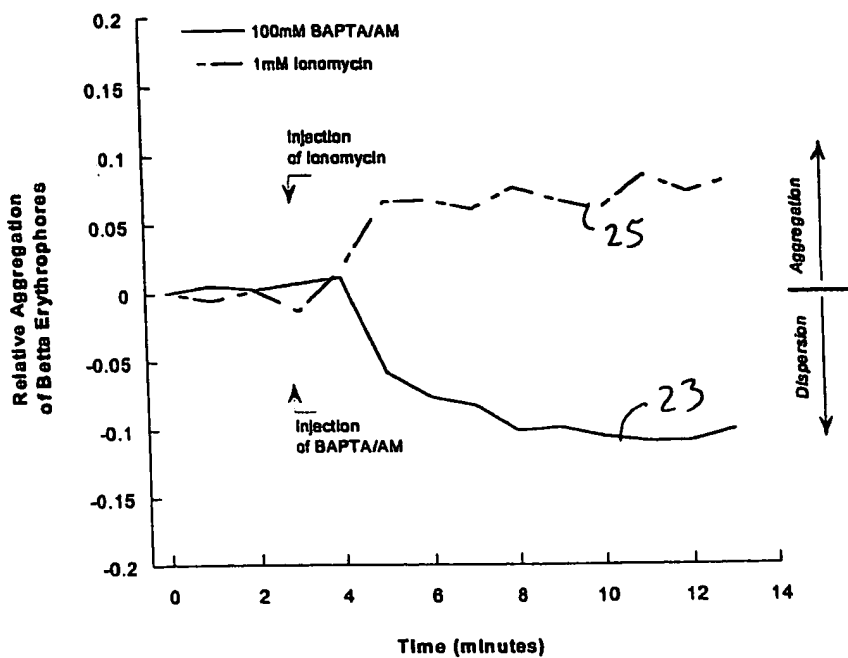


FIG. 38

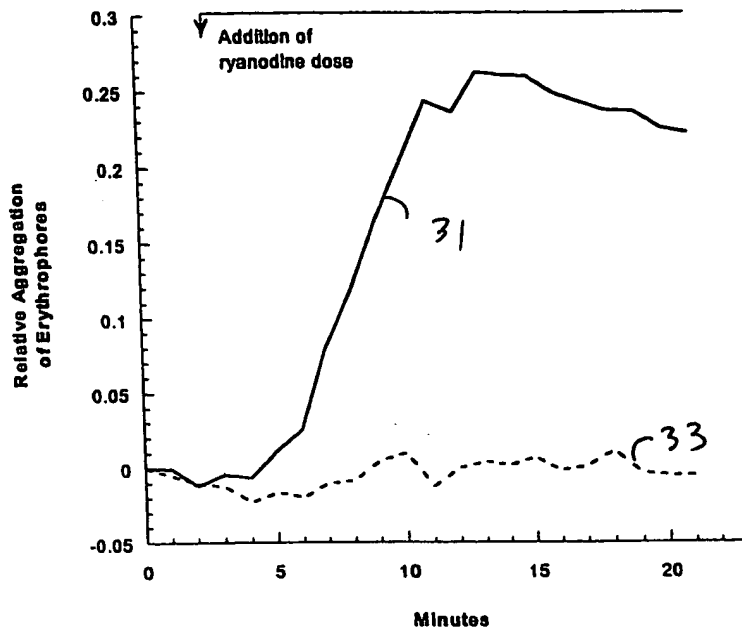


FIG. 39

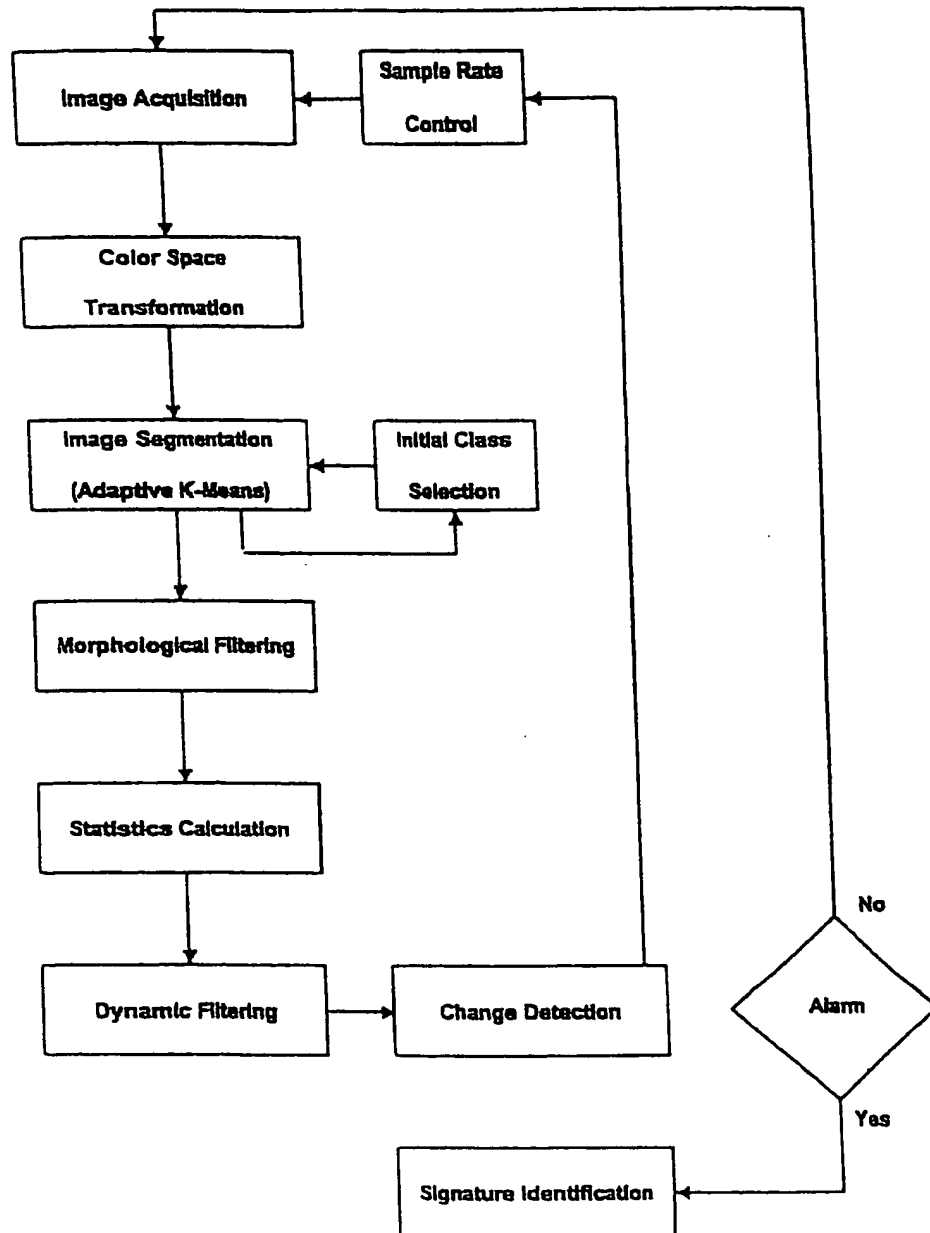


FIG. 40

Stacey C. Slater
Klarquist Sparkman, LLP
121 SW Salmon Street
Suite 1600
Portland, Oregon 97204
Telephone: (503) 226-7391
Page 34 of 66

Our Ref. No. 245-67734
For: METHOD AND SYSTEM FOR
CLASSIFYING A SCENARIO
Inventor(s): Chaplen et al.
Express Mail Label: EV339206009US
Mailed: March 12, 2004

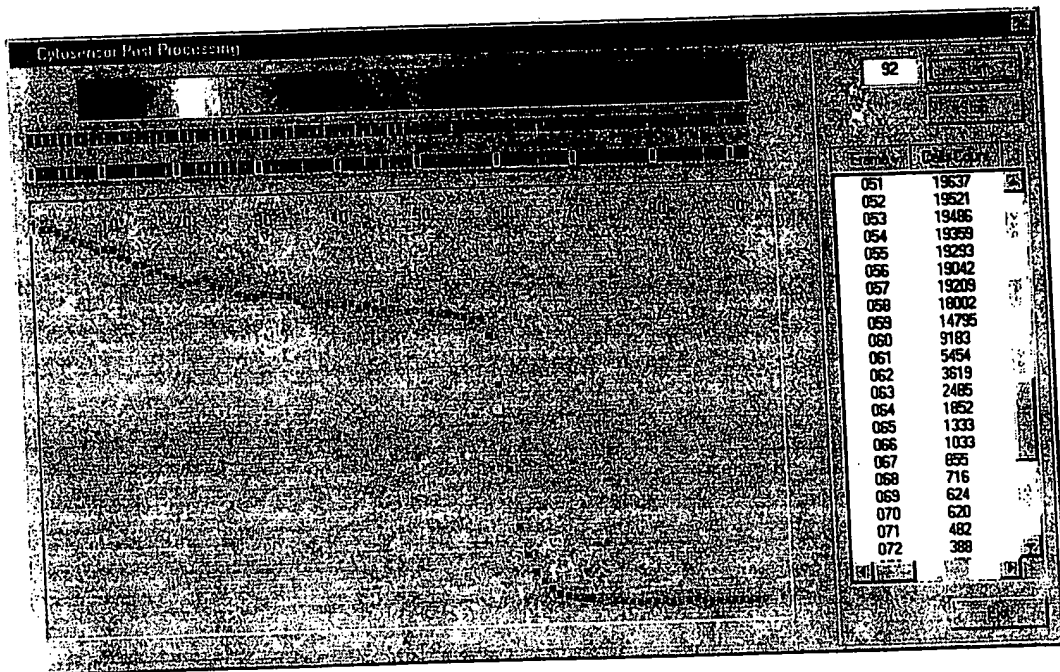


FIG. 41

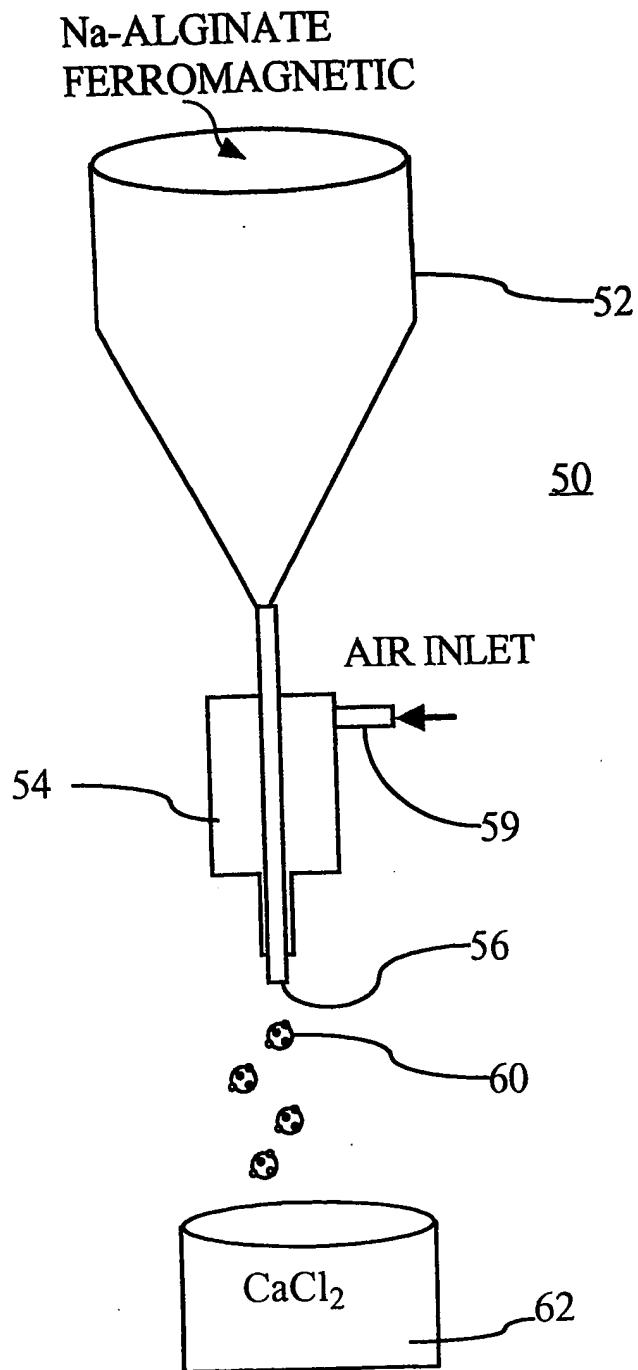


FIG. 42

Stacey C. Slater
Klarquist Sparkman, LLP
121 SW Salmon Street
Suite 1600
Portland, Oregon 97204
Telephone: (503) 226-7391
Page 36 of 66

Our Ref. No. 245-67734
For: METHOD AND SYSTEM FOR
CLASSIFYING A SCENARIO
Inventor(s): Chaplen et al.
Express Mail Label: EV339206009US
Mailed: March 12, 2004

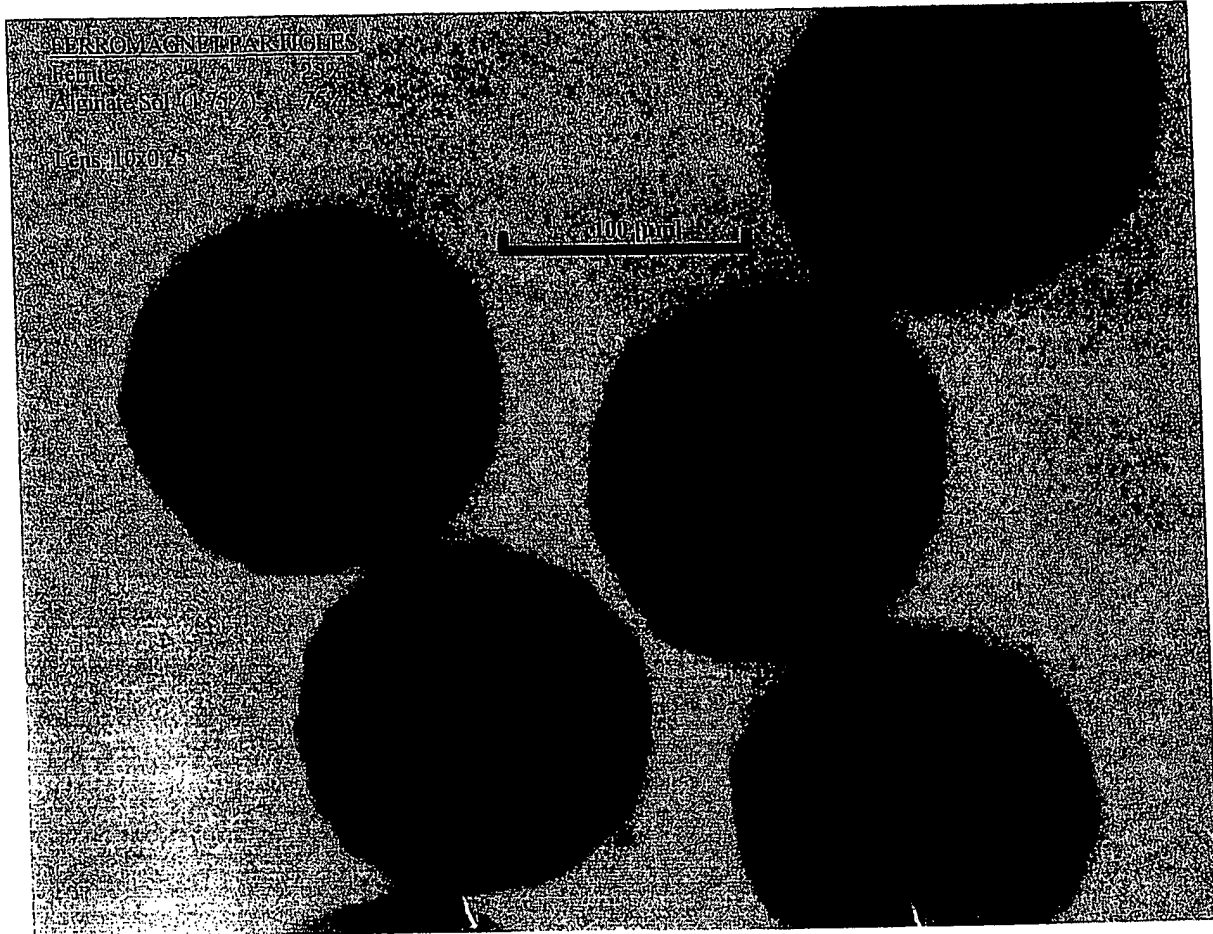


FIG. 43

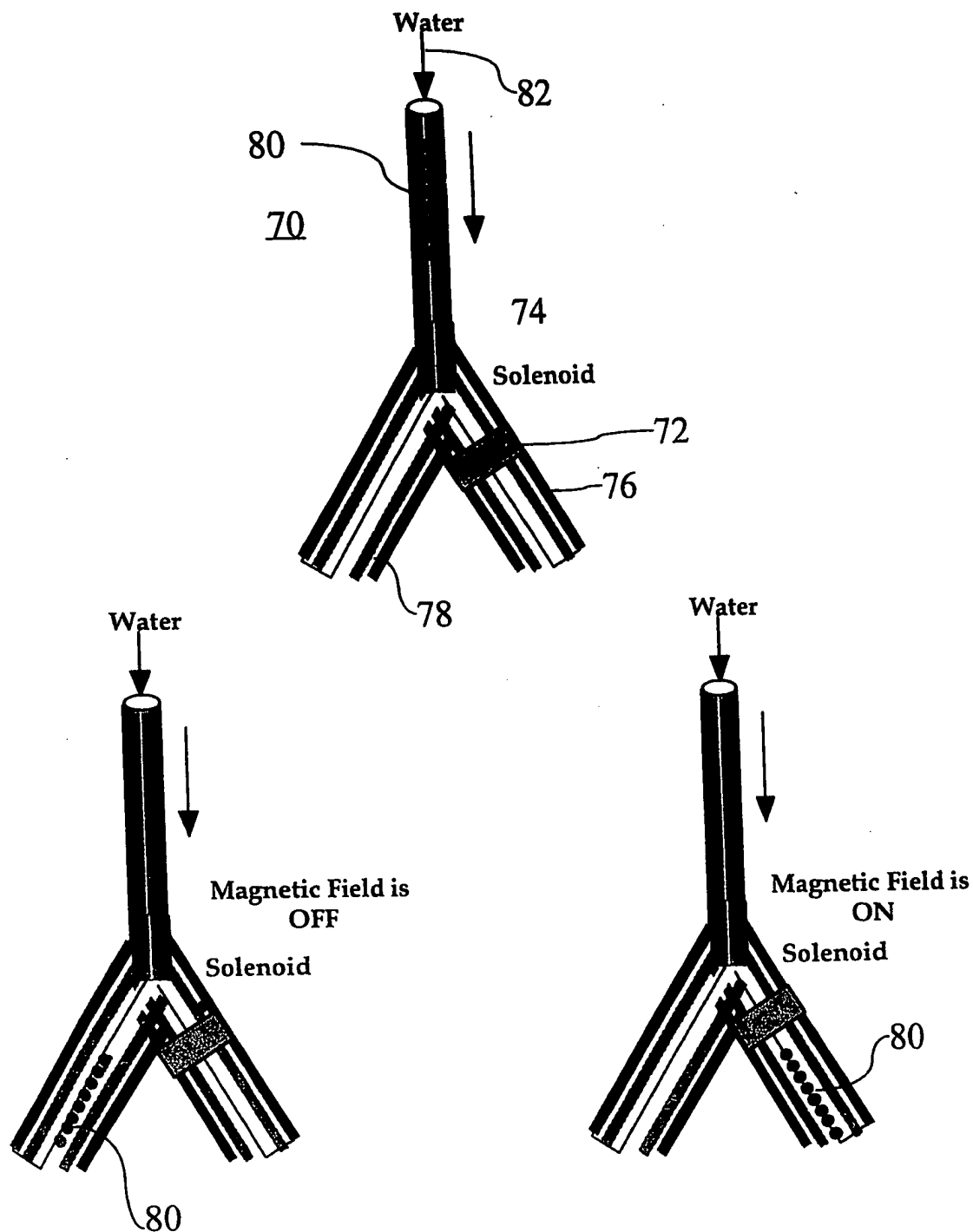


FIG. 44

FIG. 45

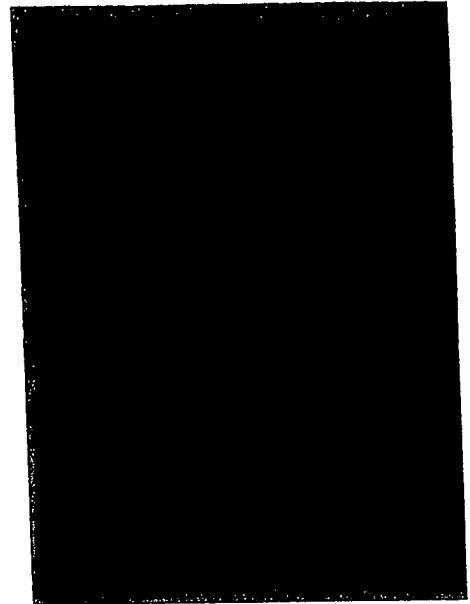
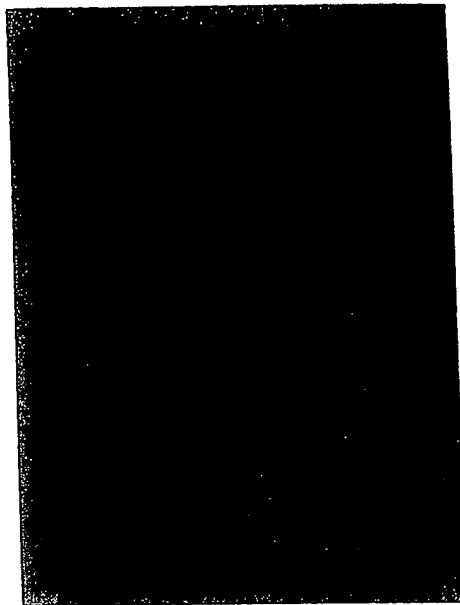


FIG. 46

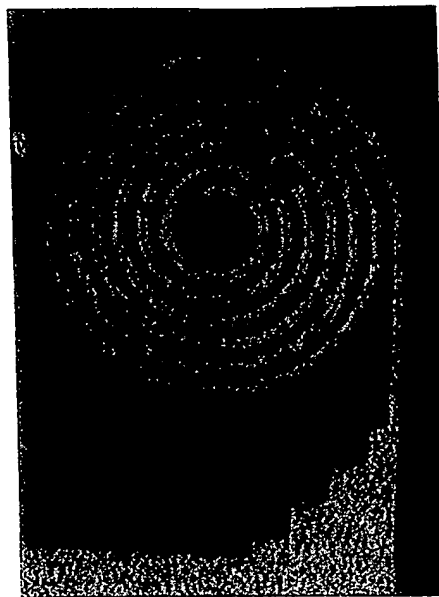


FIG. 47

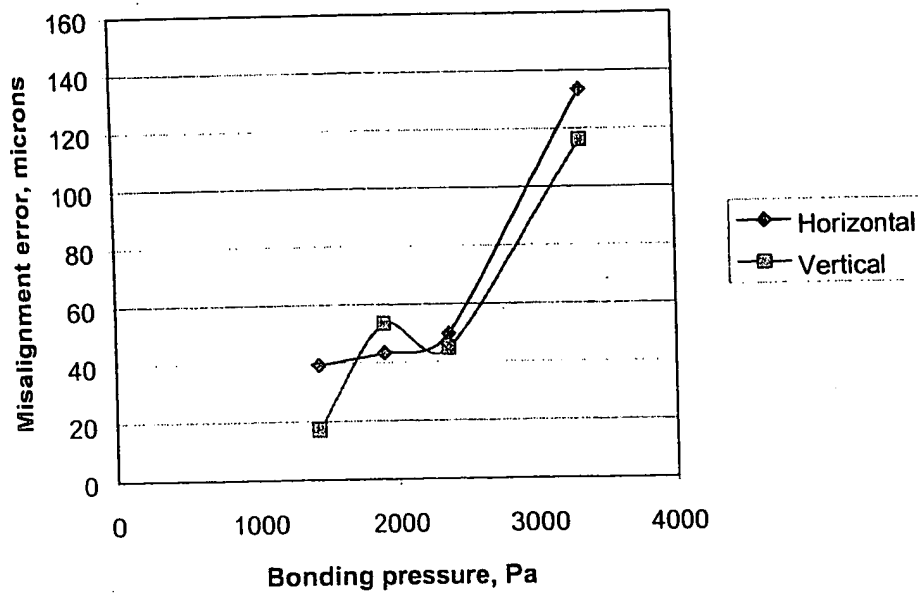


FIG. 48

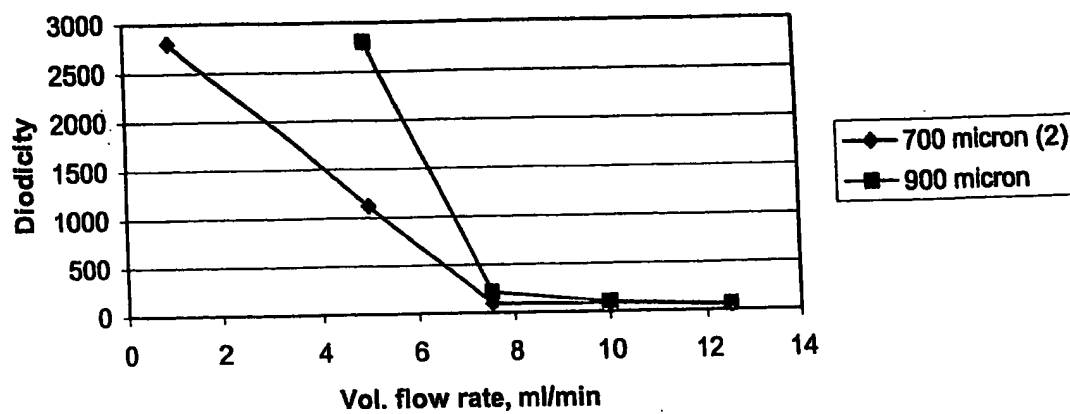


FIG. 49

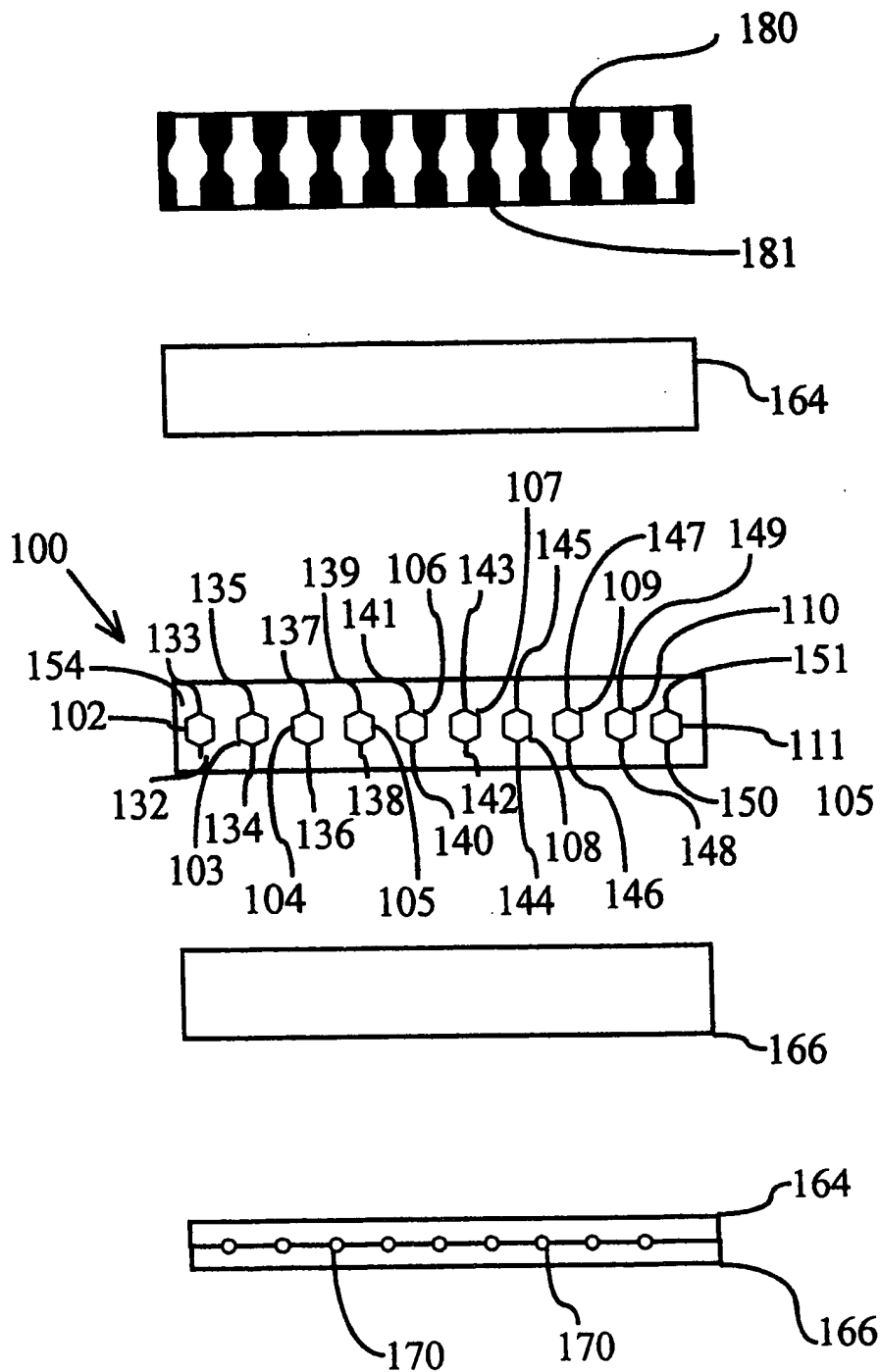


FIG. 50

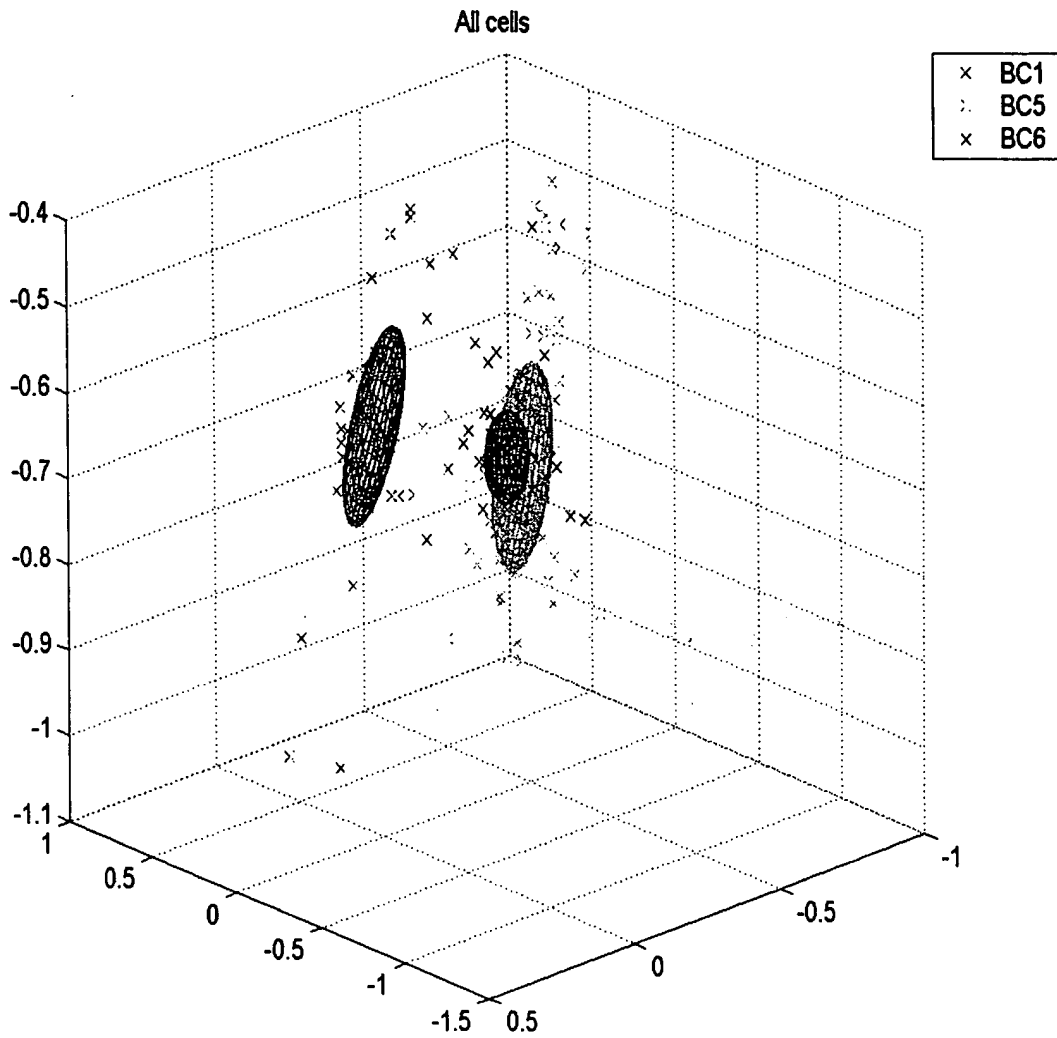


FIG. 51

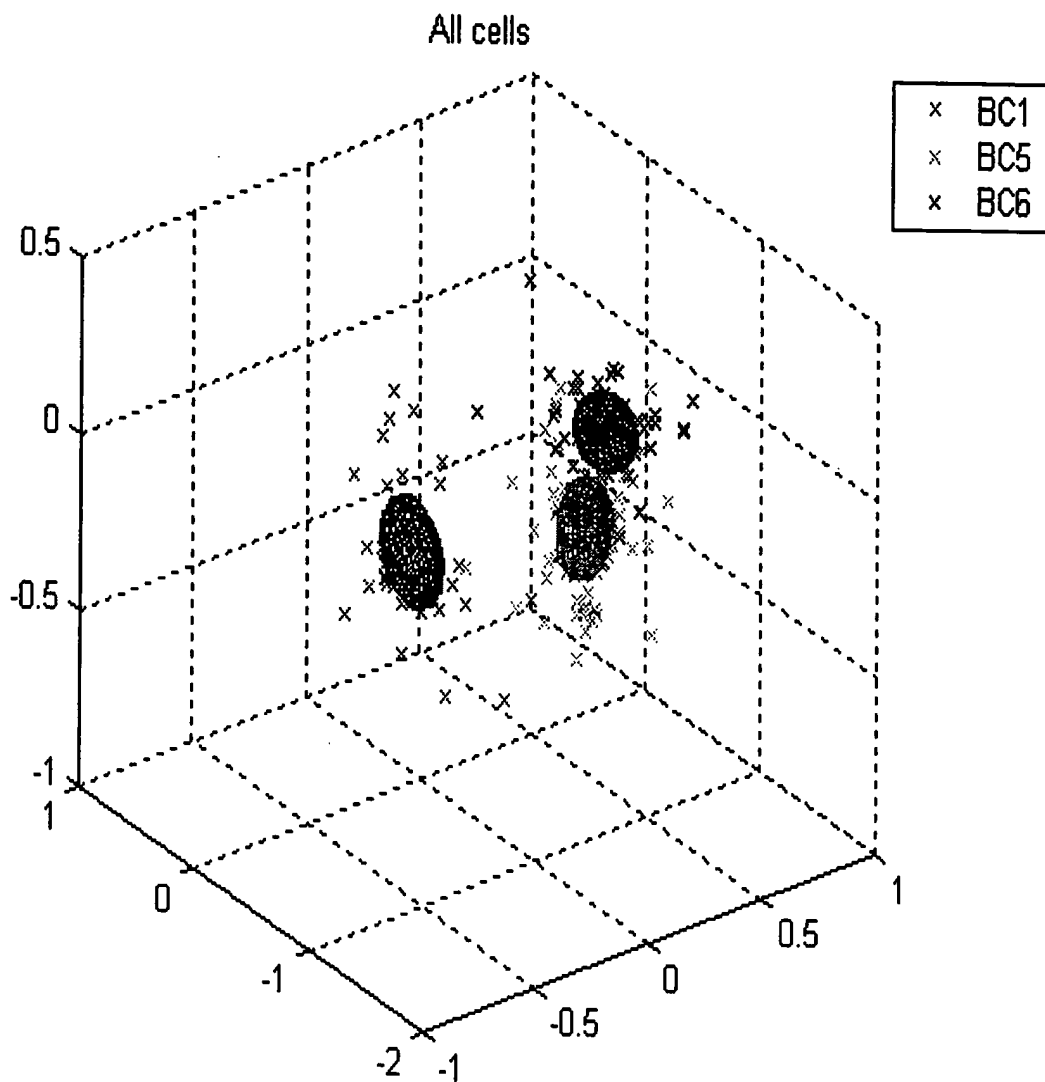


FIG. 52

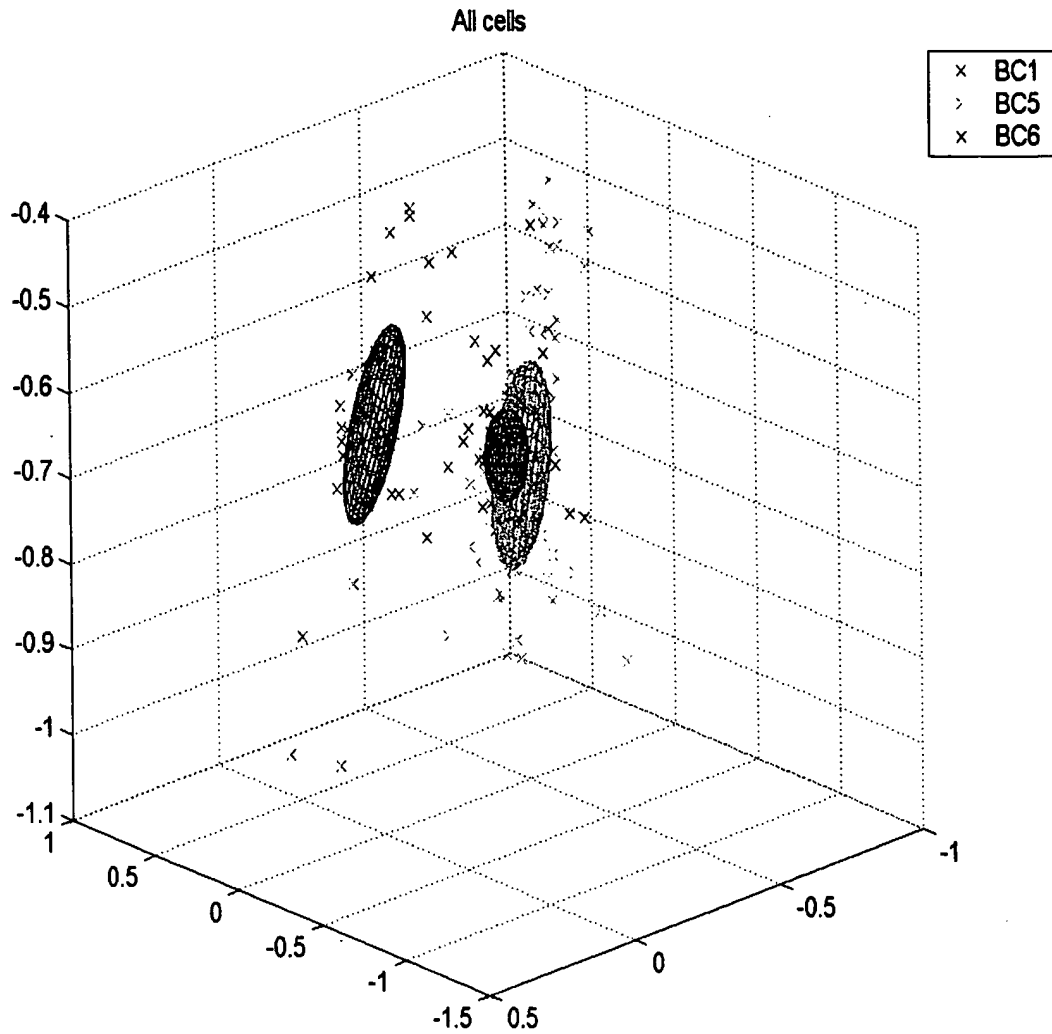


FIG. 53

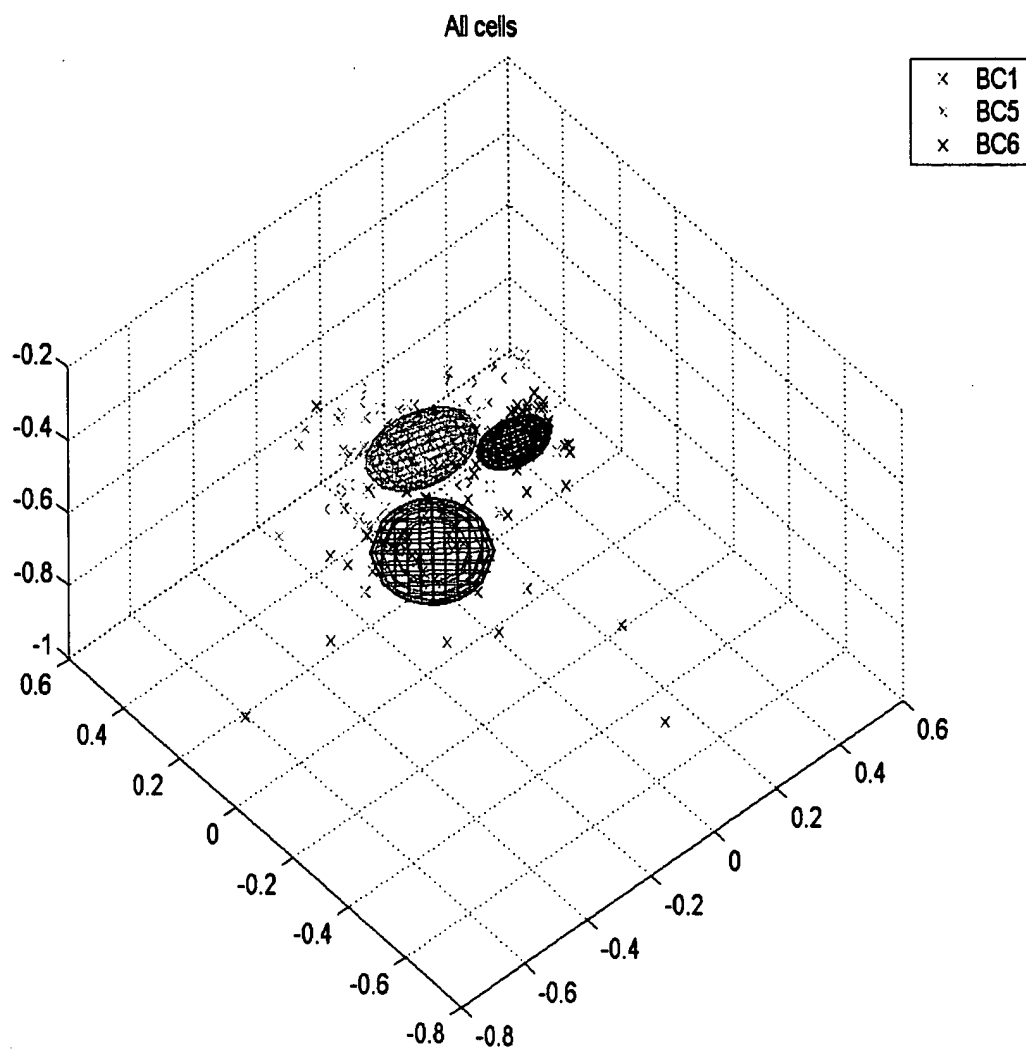


FIG. 54

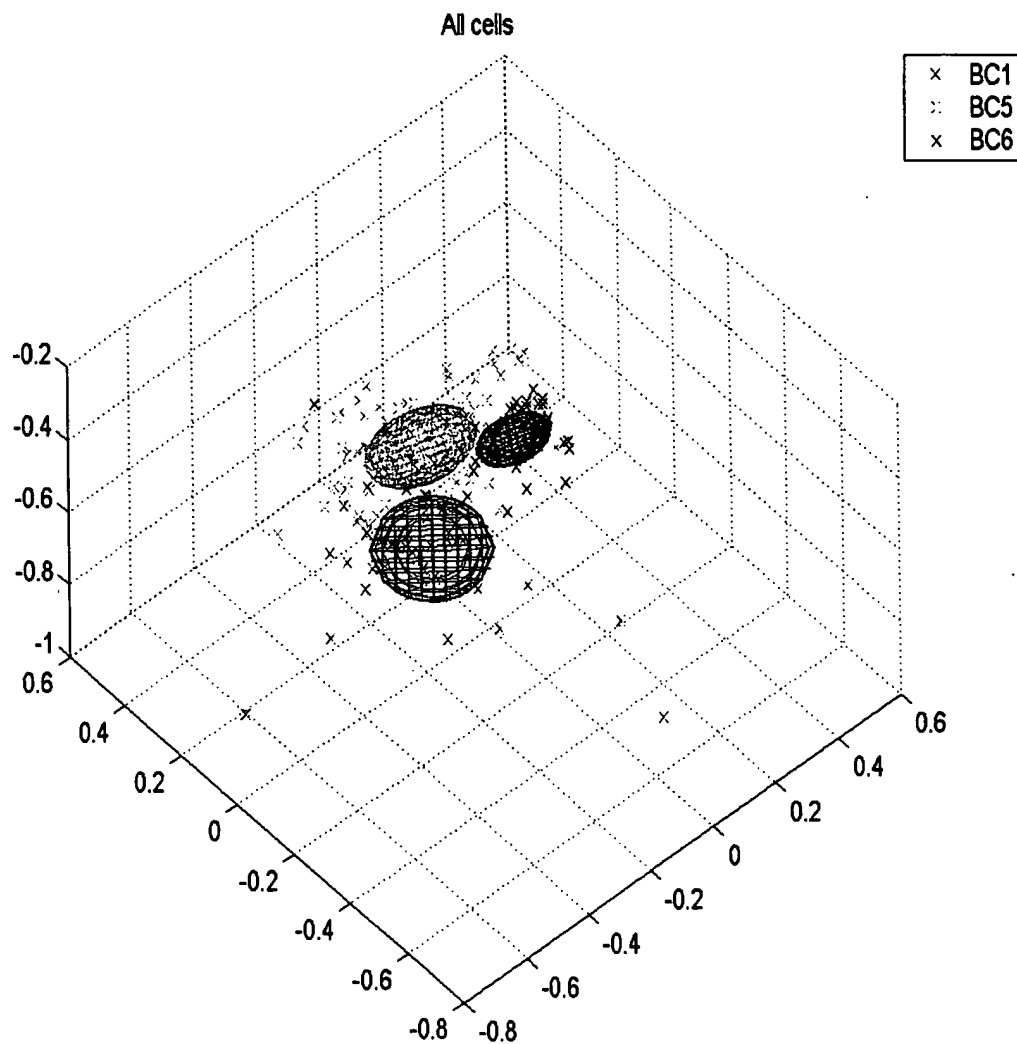


FIG. 55

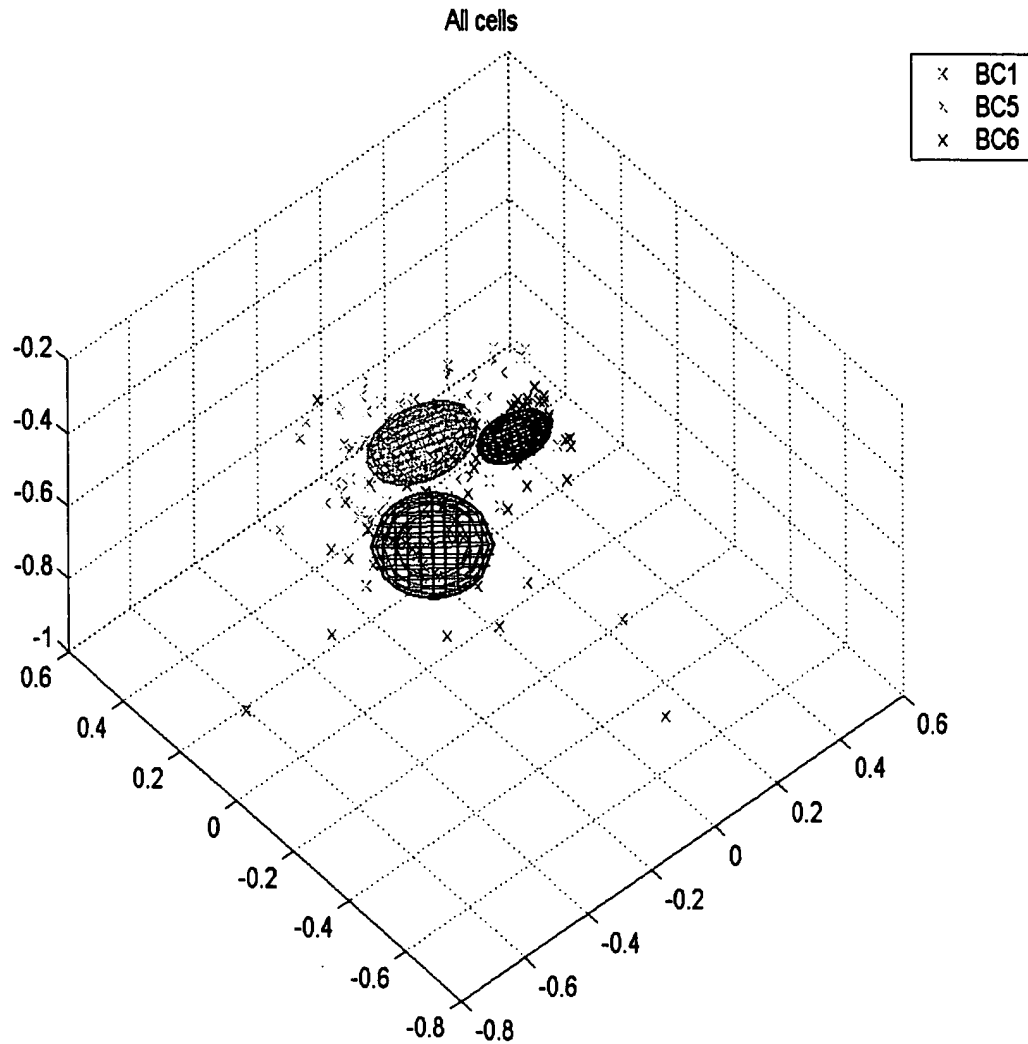


FIG. 56

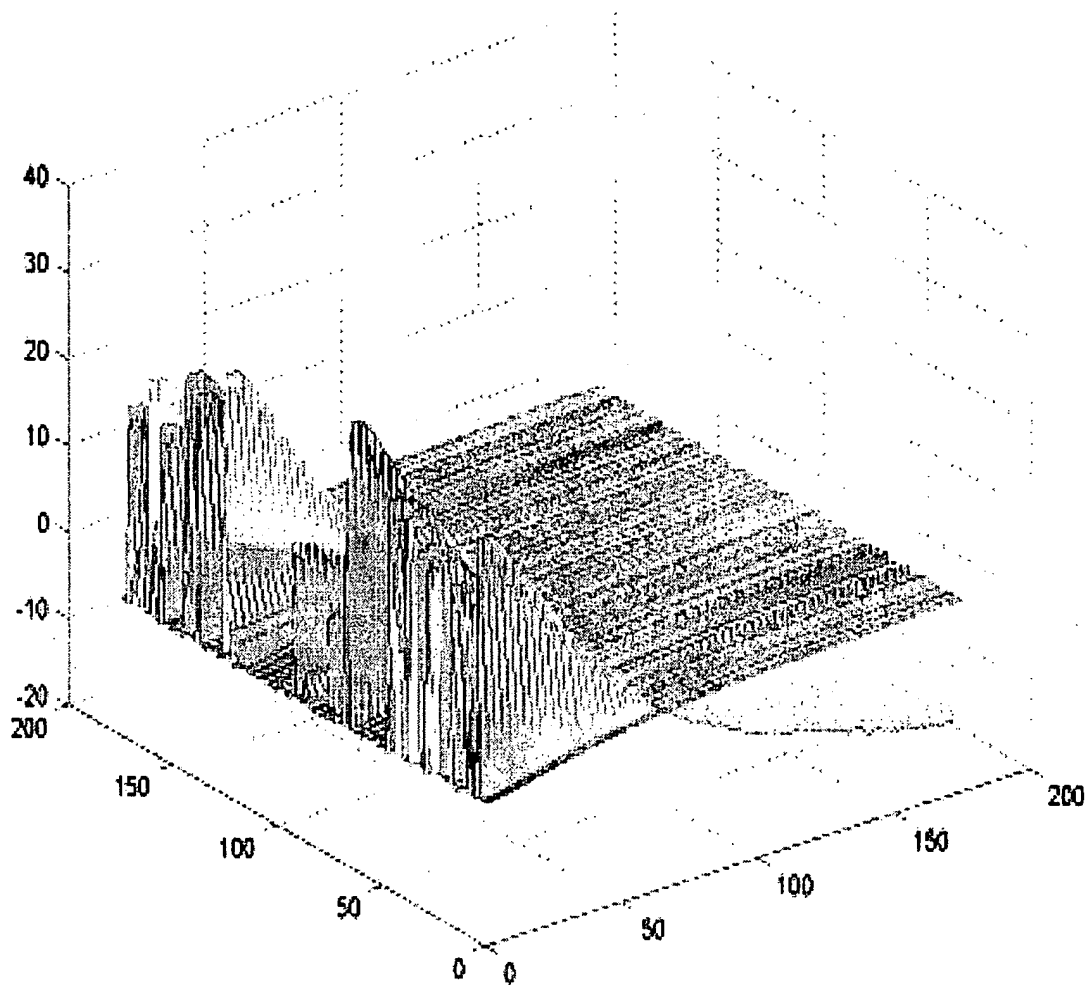


FIG. 57A

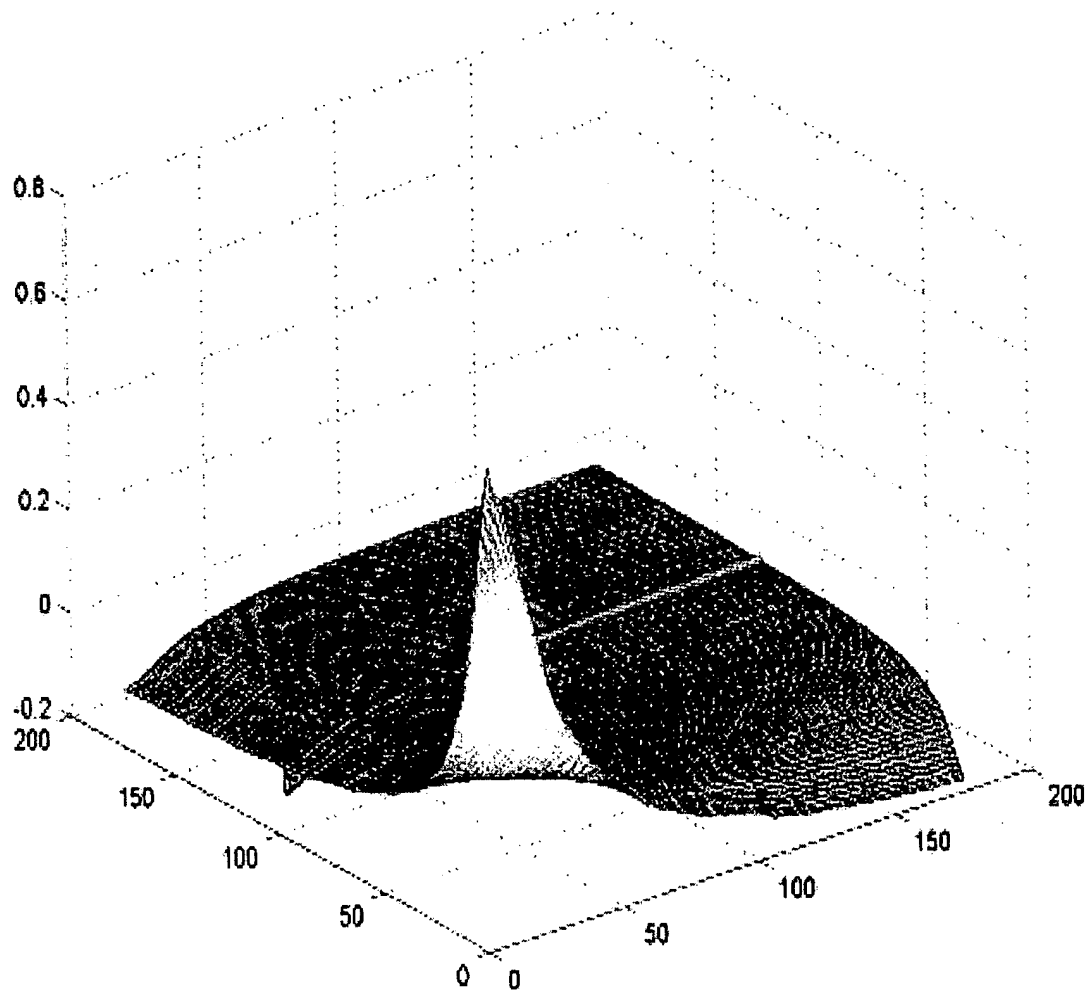


FIG. 57B

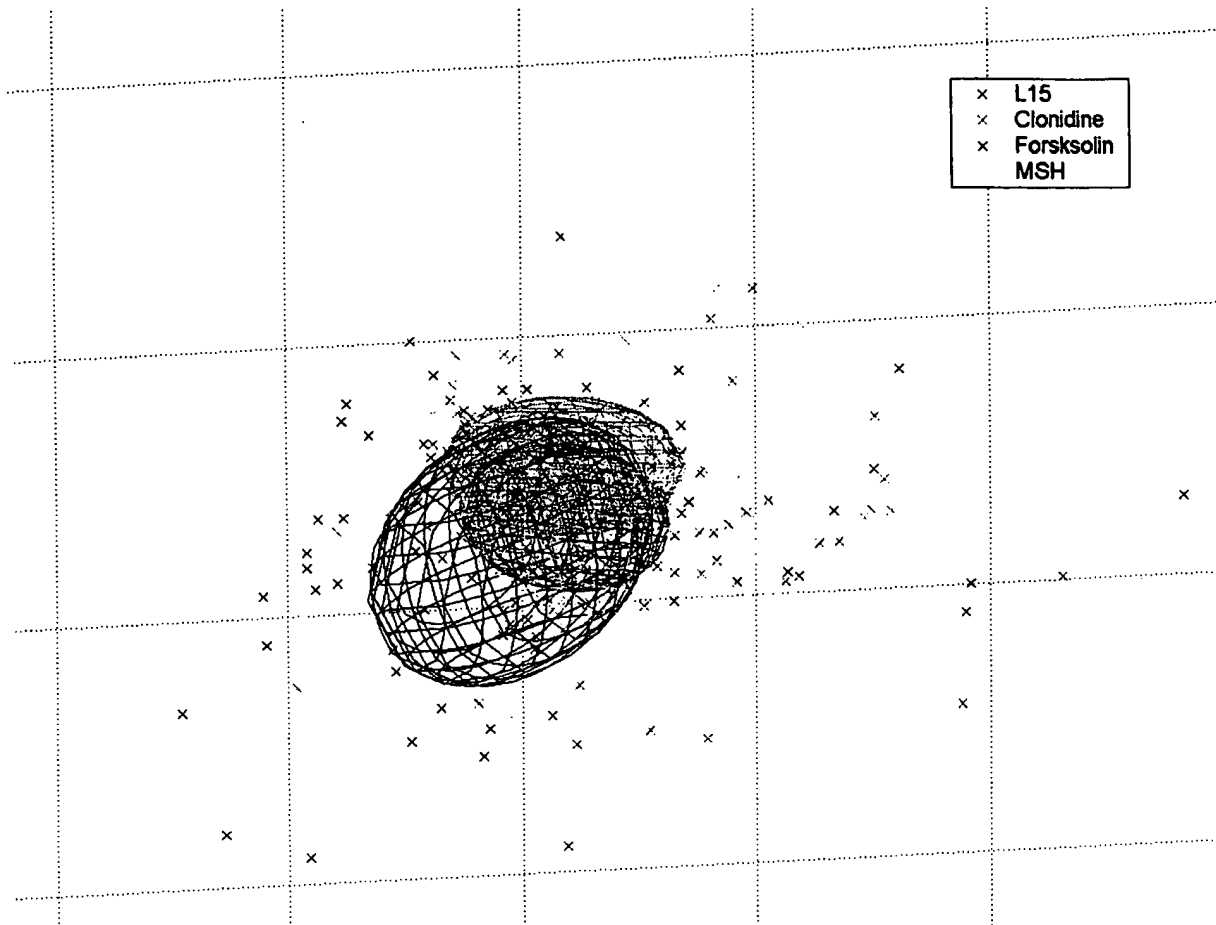


FIG. 58

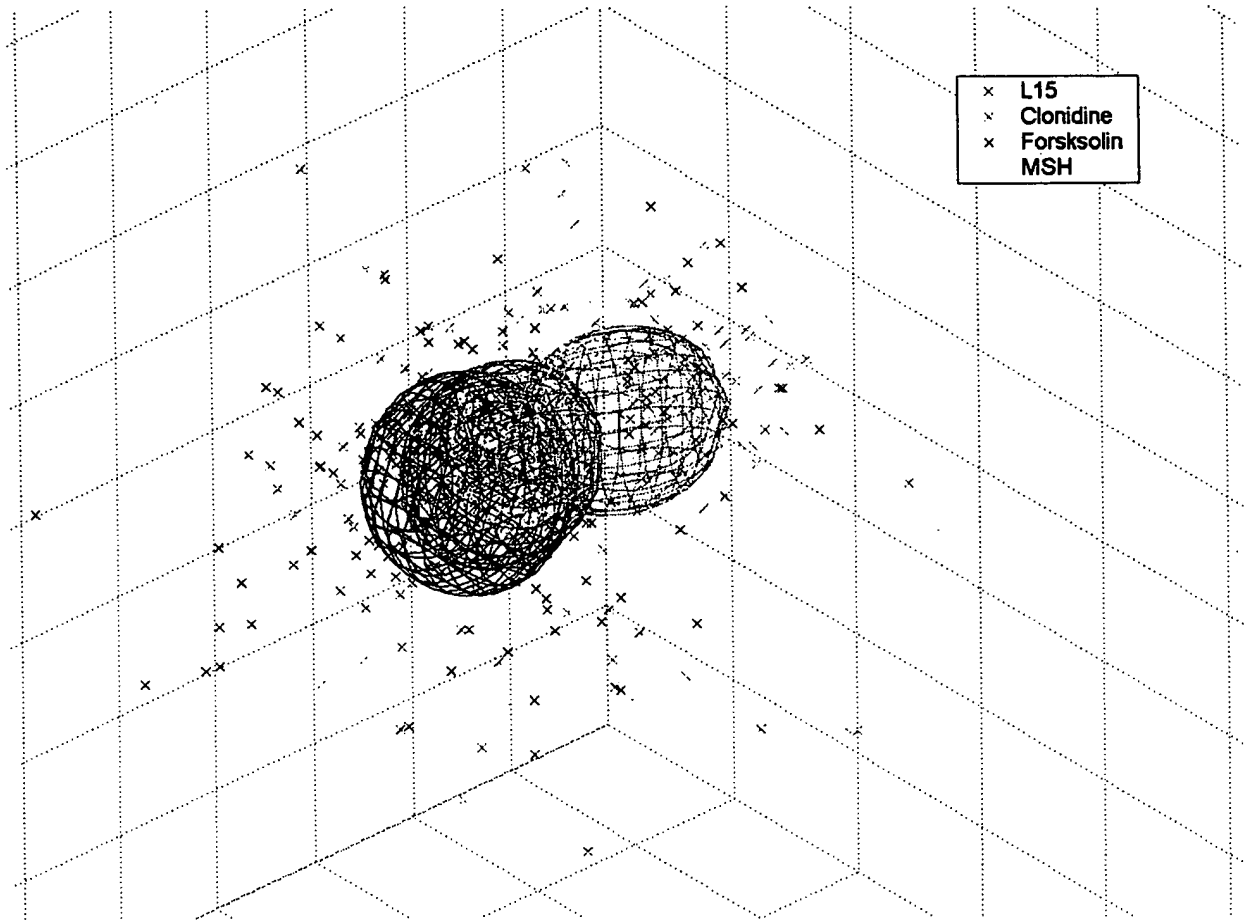


FIG. 59

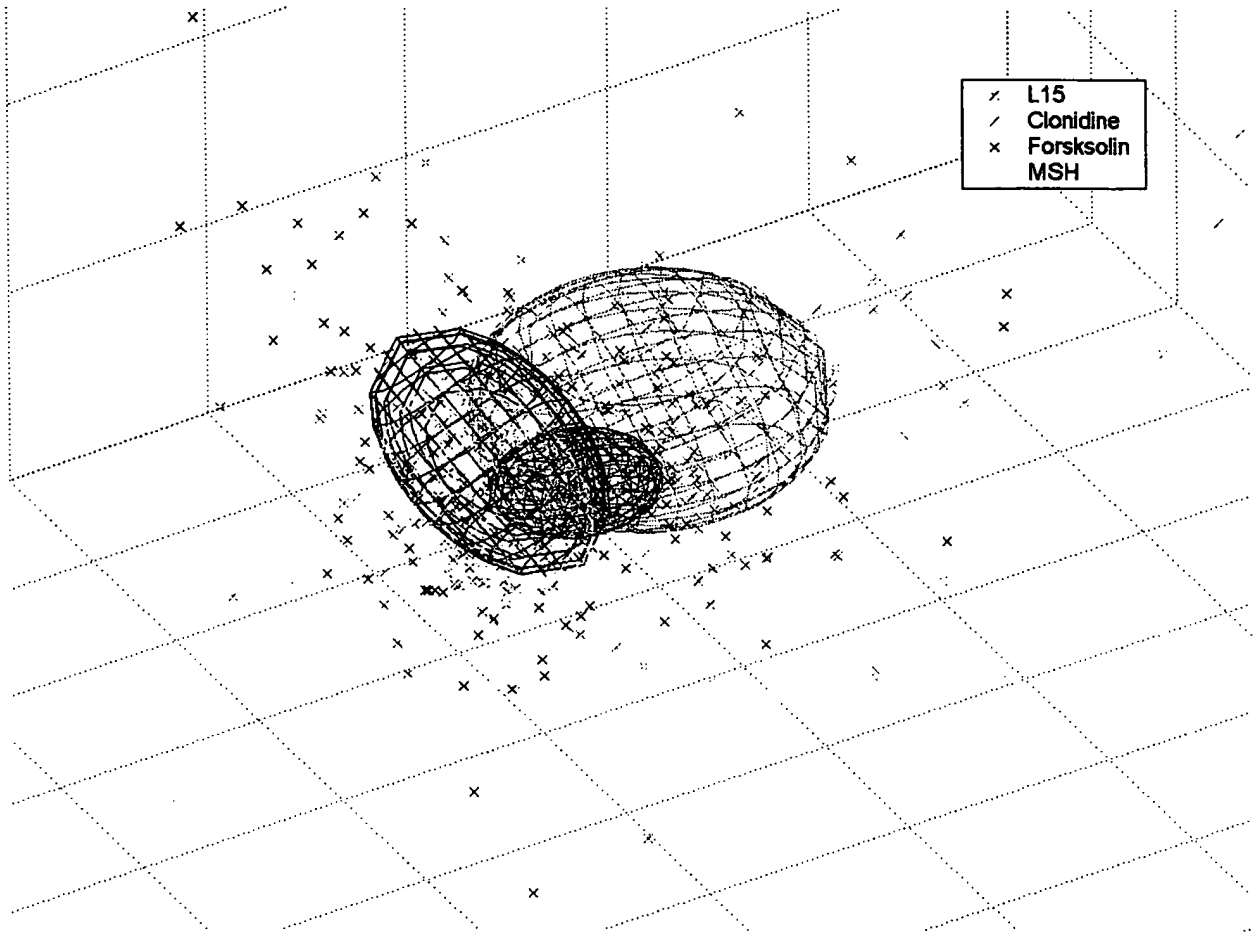


FIG. 60

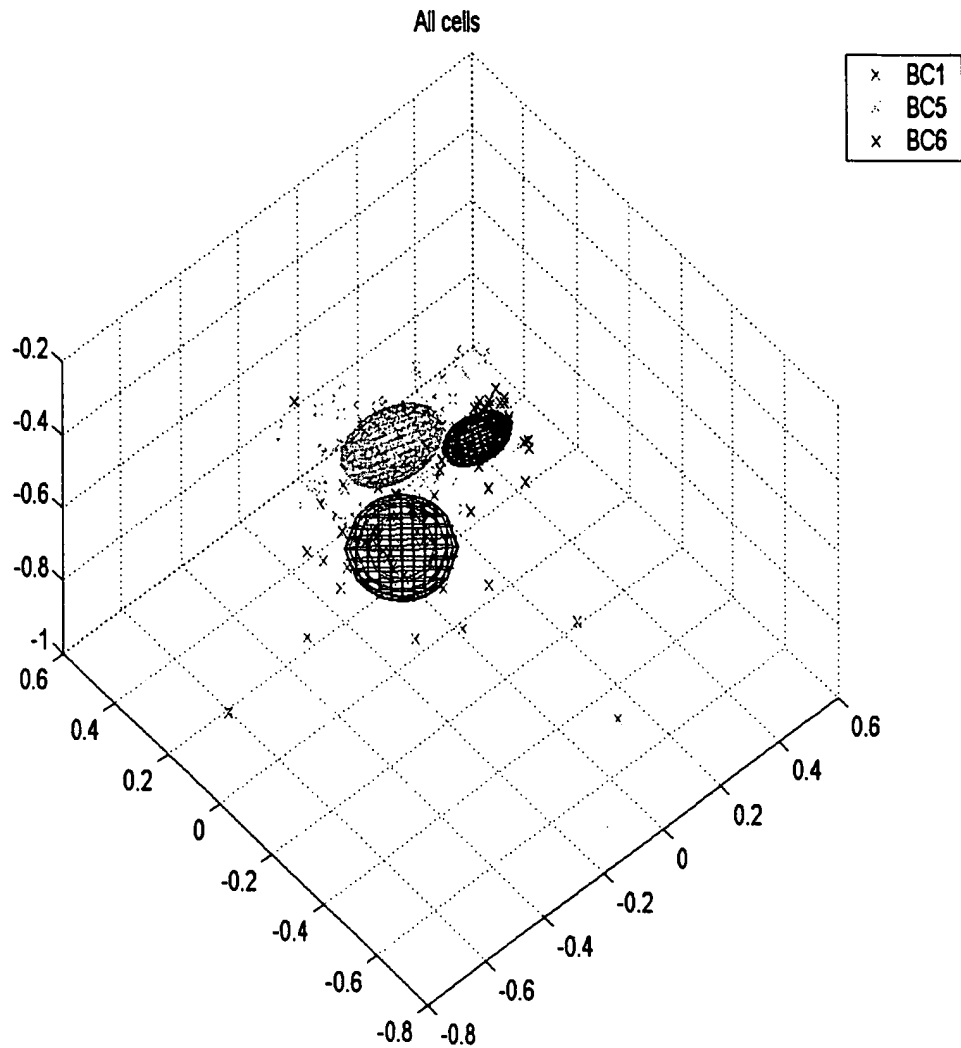


FIG. 61A

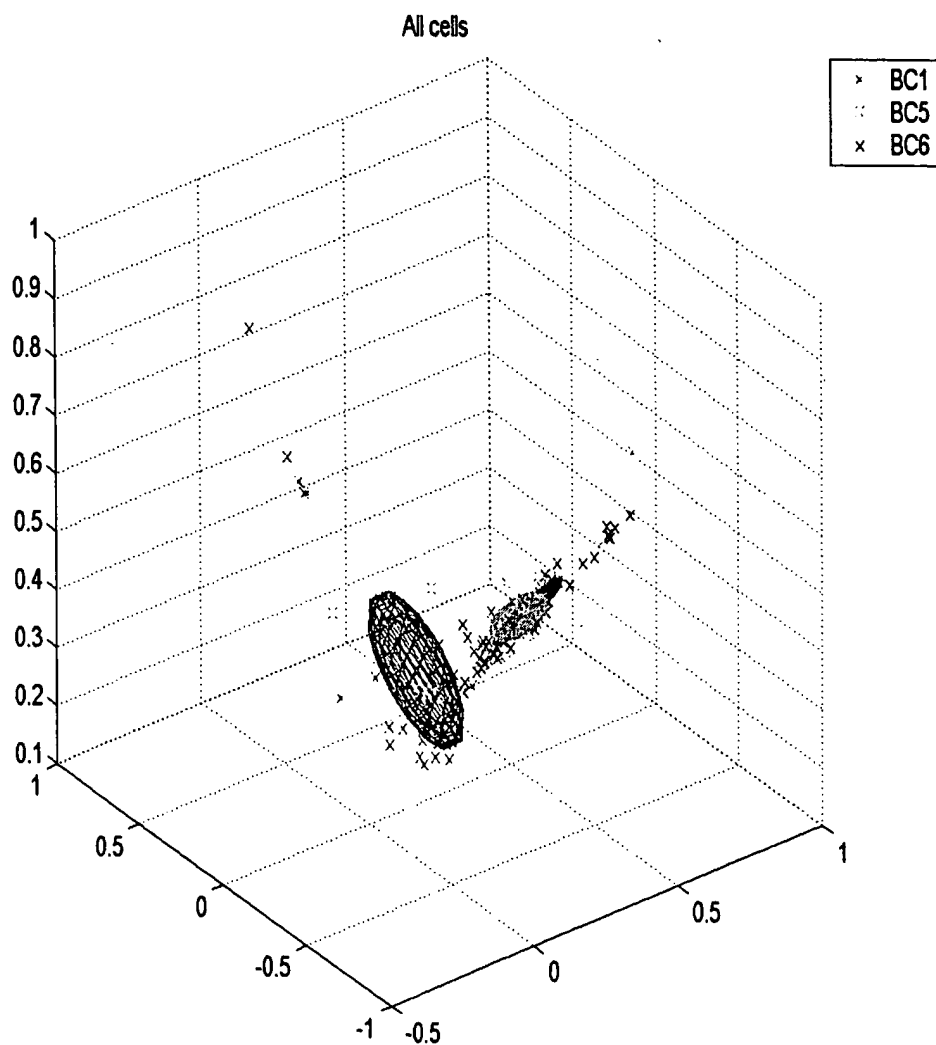


FIG. 61B

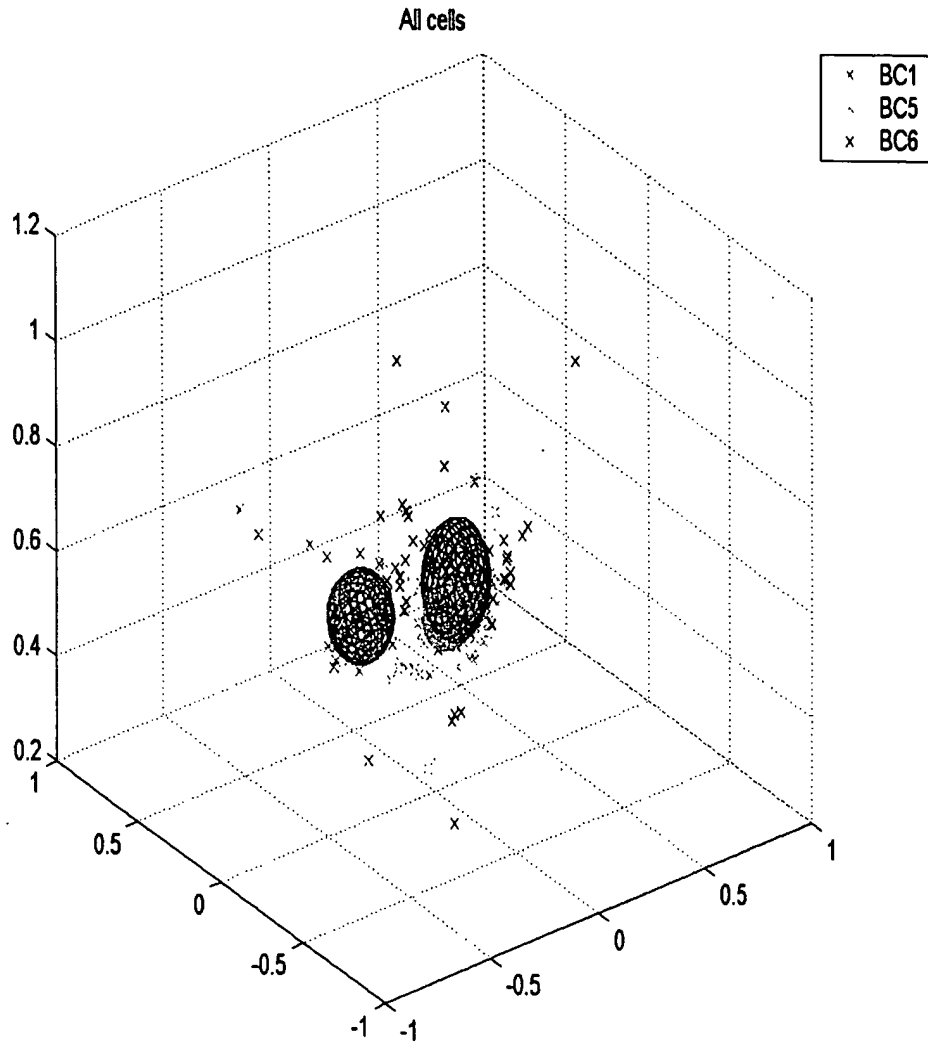


FIG. 61C

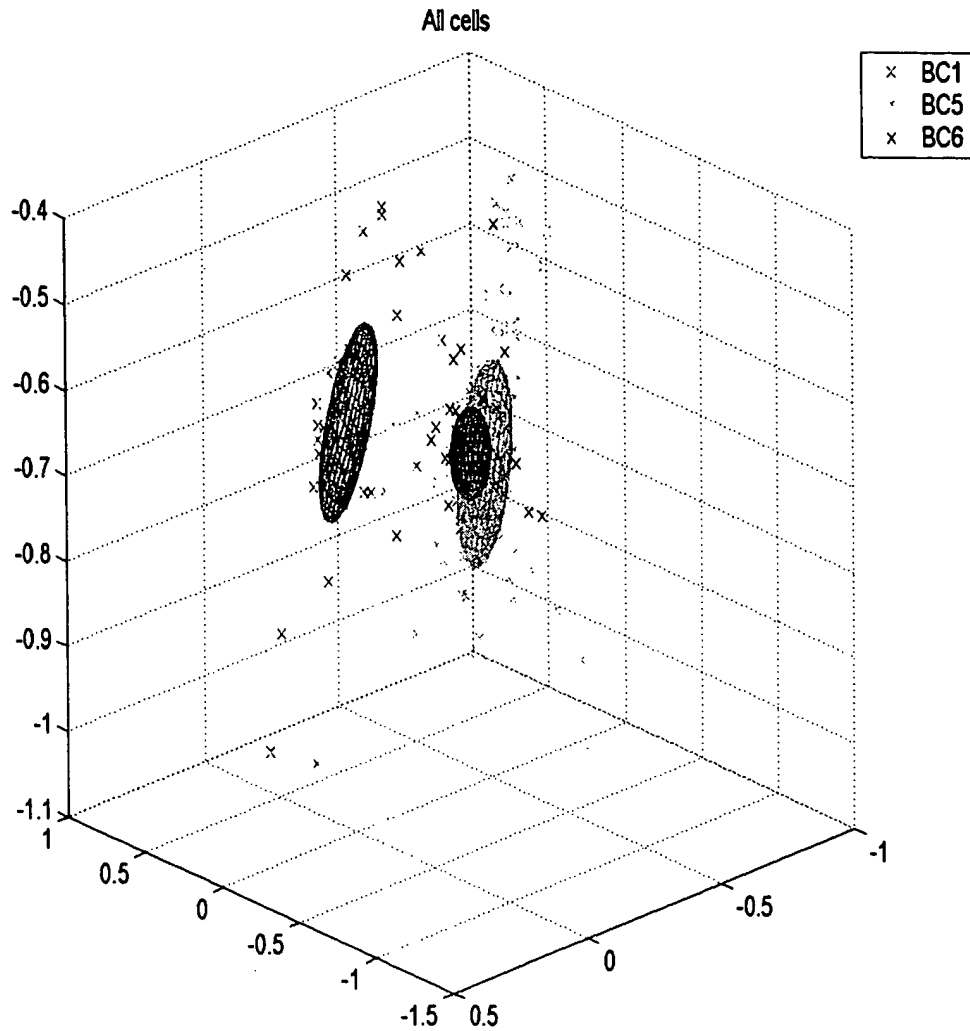


FIG. 61D

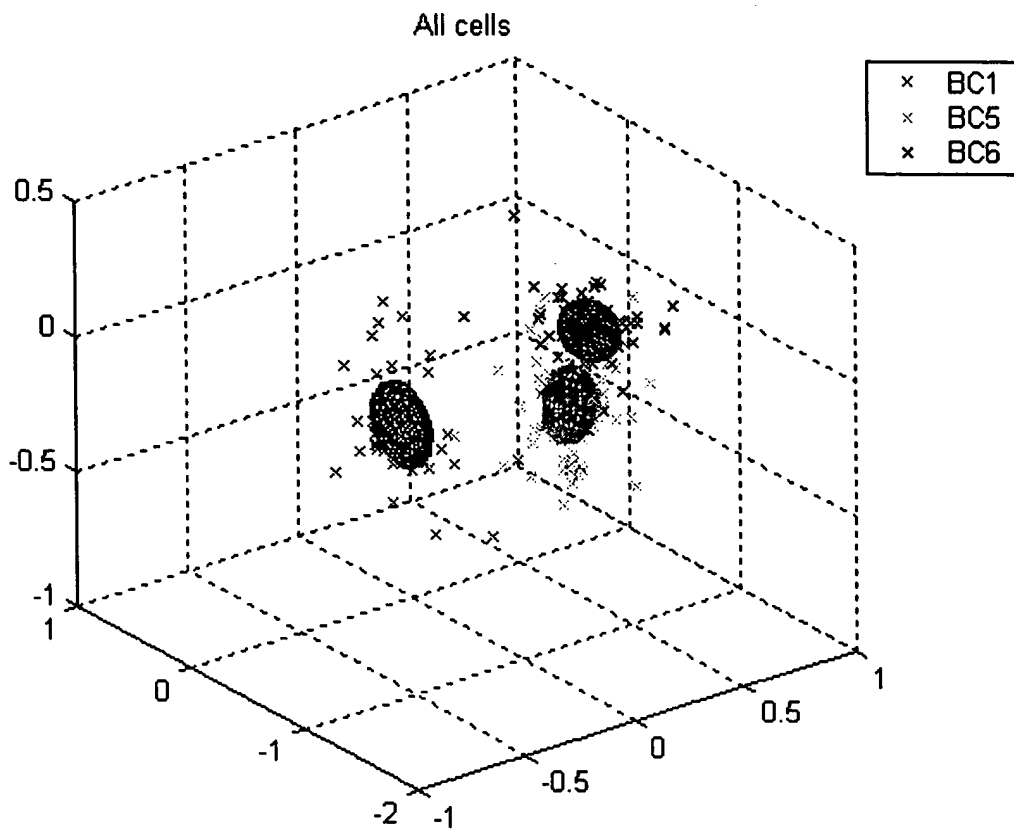


FIG. 62

FIG. 63C

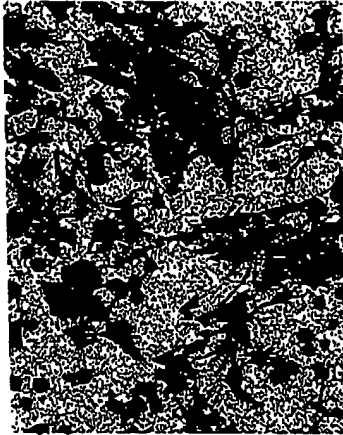


FIG. 63B

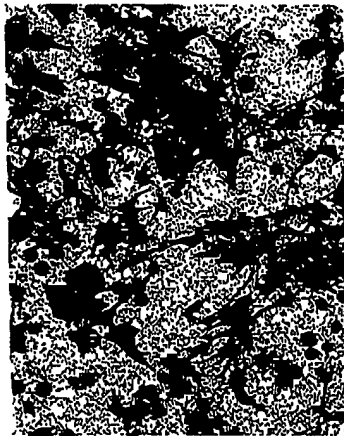


FIG. 63A

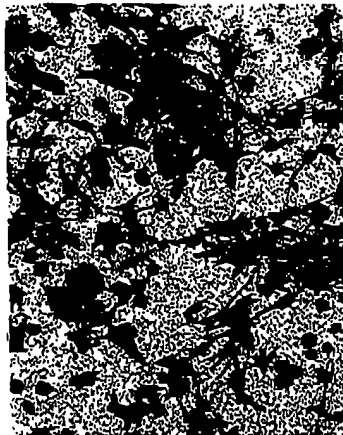


FIG. 63F

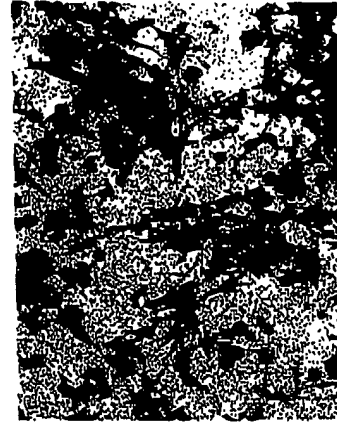
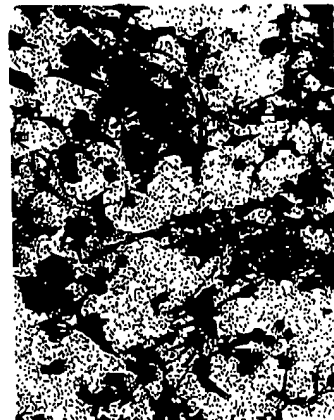


FIG. 63E



FIG. 63D



5

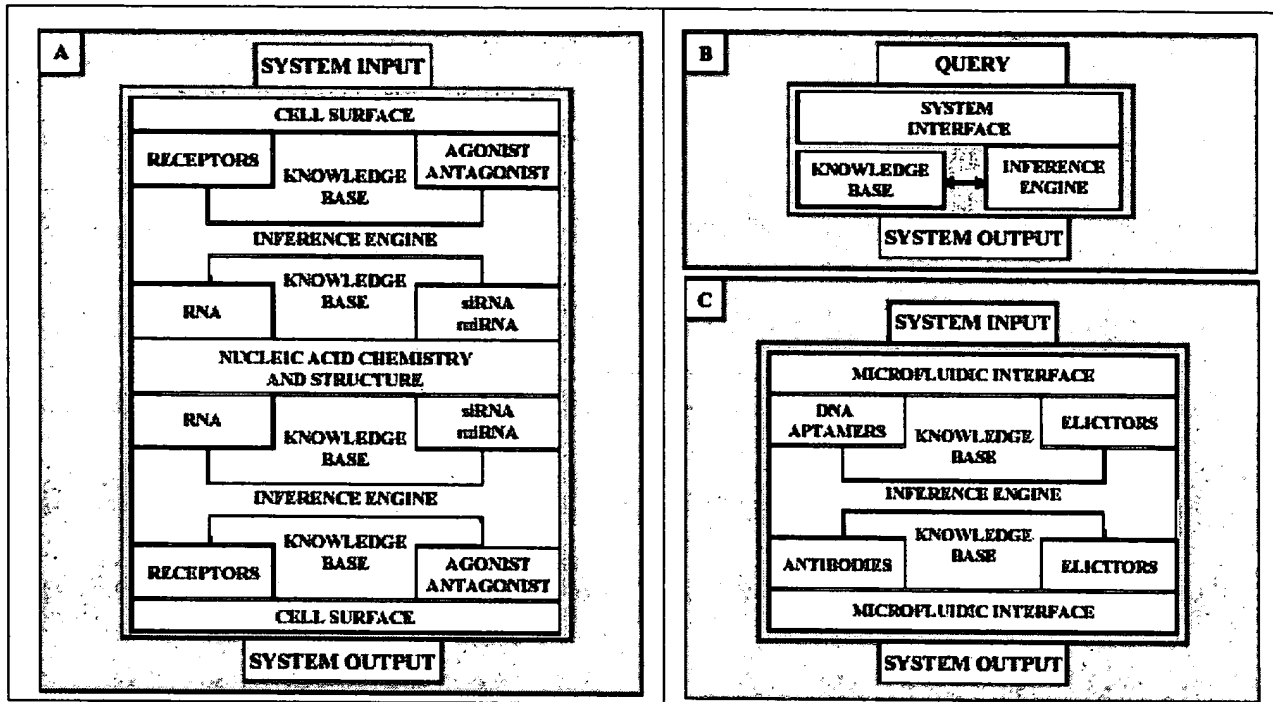


FIG. 64

5

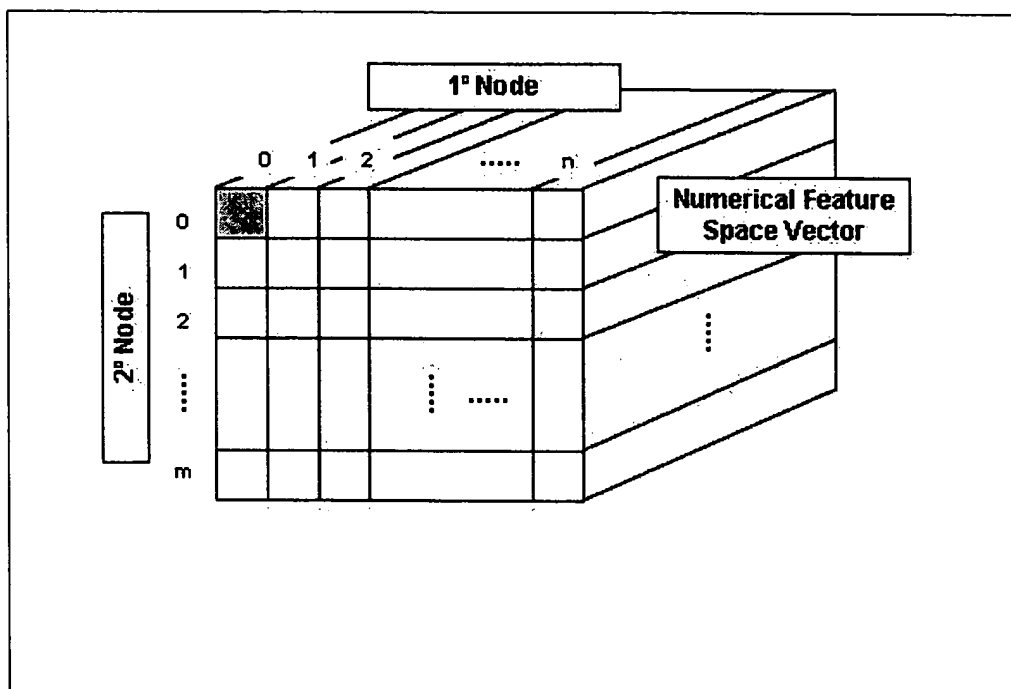


FIG. 65

A

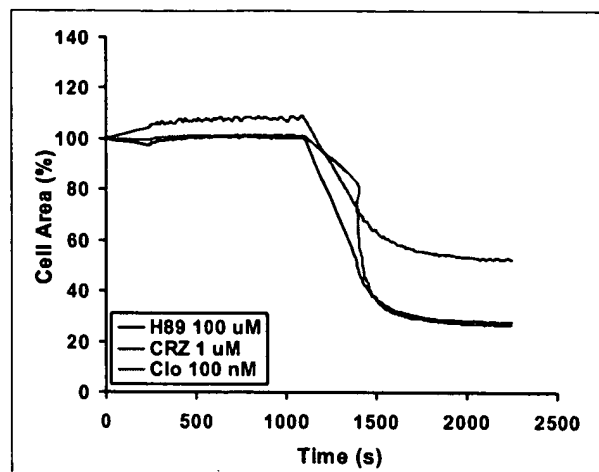


FIG 66A

B

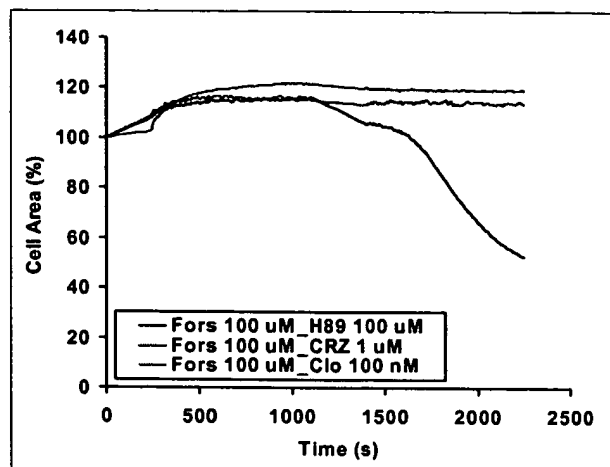


FIG. 66B

C

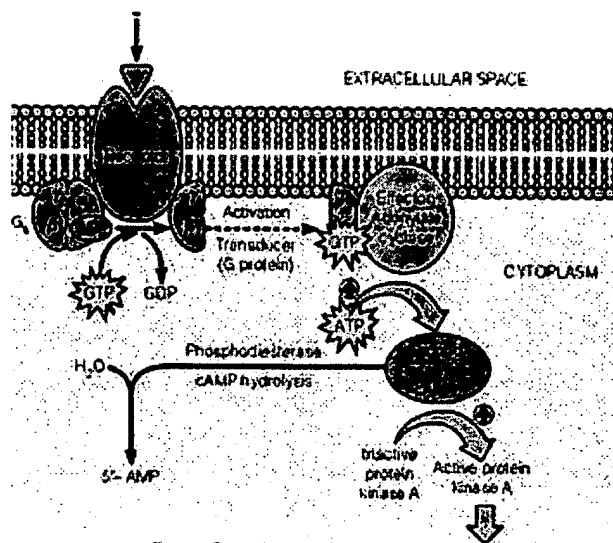


FIG. 66C

D

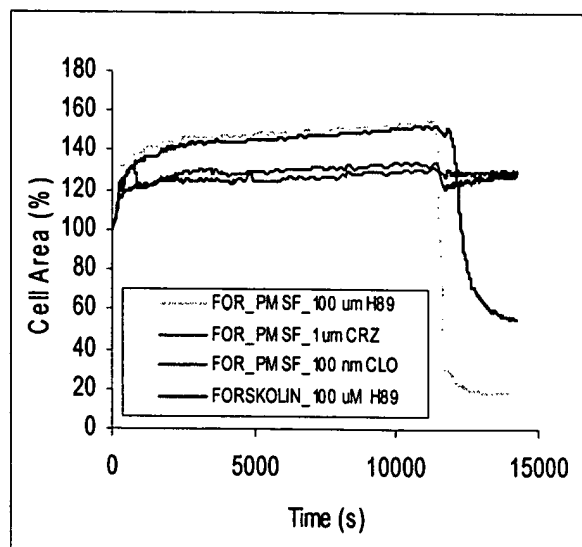


FIG. 66D

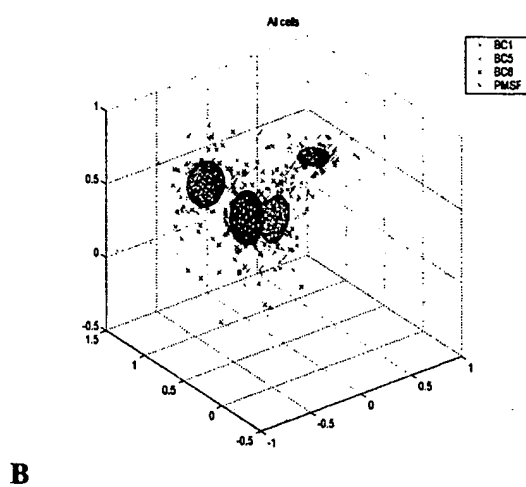
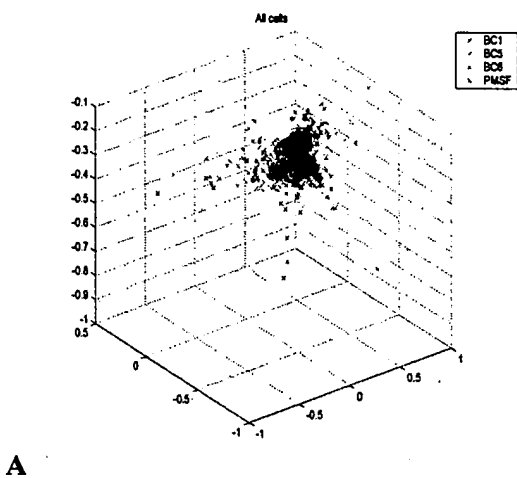
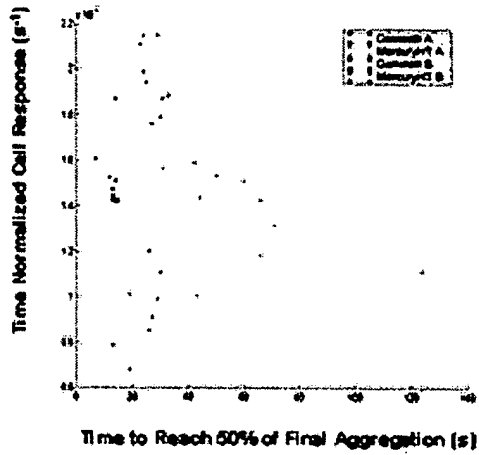


FIG. 67



	Gemini III n	Gemini III Mean	Gemini III σ
Fish A	9	4.1	2.4
Fish B	9	5.8	3.7
	MercuryHT n	MercuryHT Mean	MercuryHT σ
Fish A	9	12	23
Fish B	9	6.4	5.9

FIG. 68

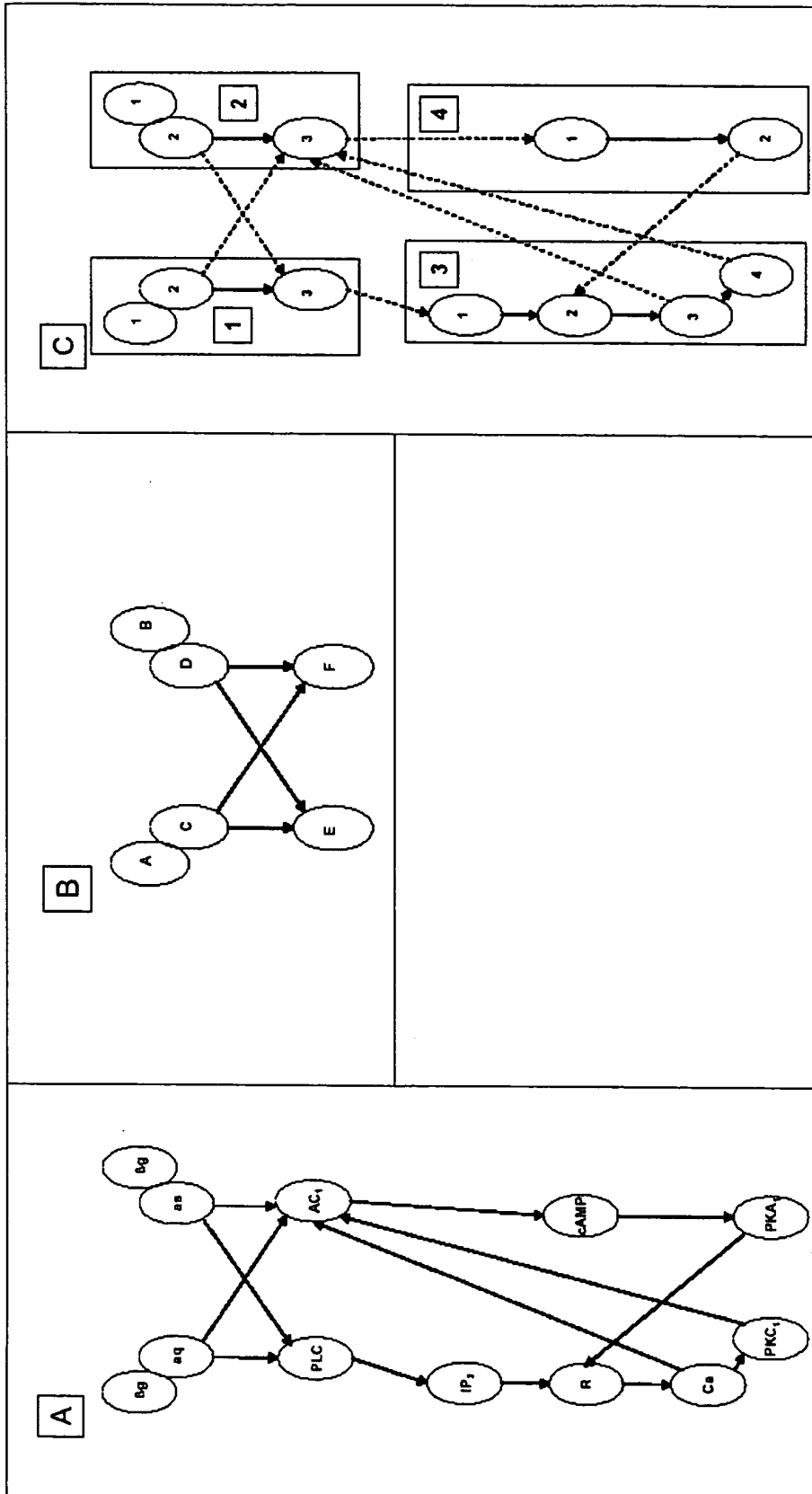


FIG. 69

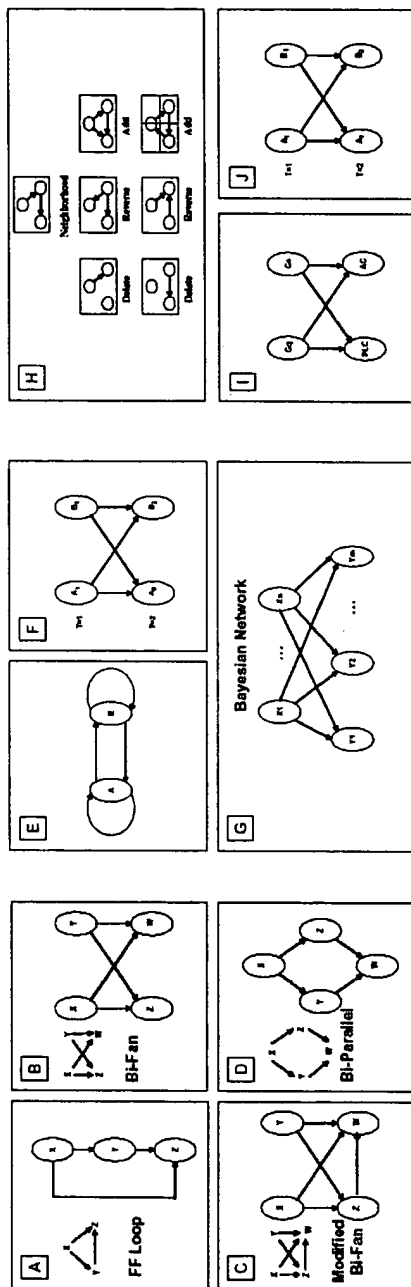


FIG. 70

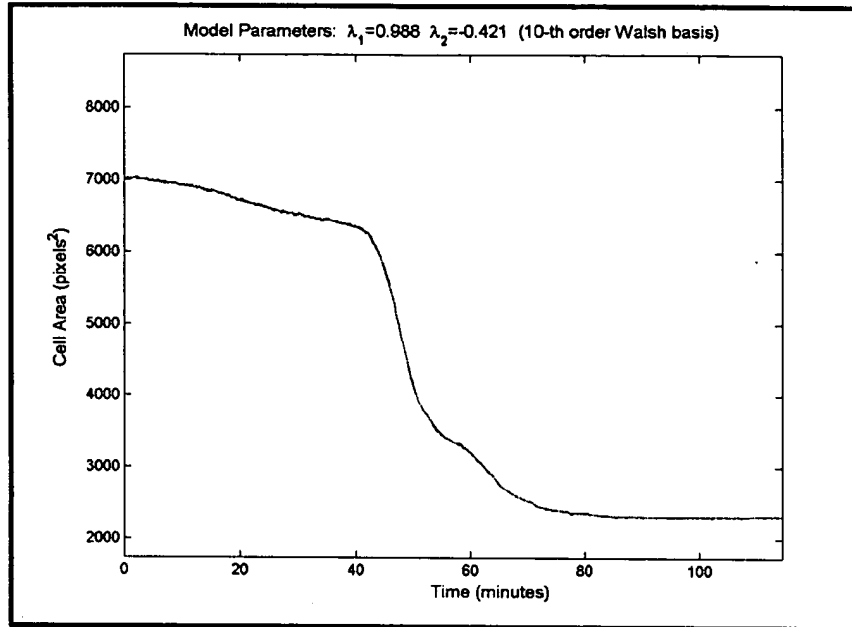


FIG. 71